



# ART & SCIENCE

ANNUAL REPORT 2015-2016



**RUTGERS**

School of Dental Medicine



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School of Dental Medicine



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## A Message from the Dean

Dentistry combines artistic skills and scientific knowledge like no other medical profession. At dental school, we study genetics, immunology, microbiology and pathology. Psychology helps us communicate with patients and put them at ease. Material science helps us determine which materials are best suited to a patient's needs. ■ And nearly every day, dentists and other oral health-care providers create unique works of art. The craftsmanship needed to make a crown, bridge or set of dentures combines elements of sculpture, painting and ceramics. The work of oral and maxillofacial surgeons is also deeply esthetic. In fact, many dental students are attracted to dentistry because they have artistic talent. ■ Since our founding in 1956, Rutgers School of Dental

Medicine (RSDM) has prepared students to succeed in all facets of dentistry, in a world where the esthetic techniques are increasingly sophisticated and scientific knowledge has advanced the profession by leaps and bounds, incorporating genetics to create a system of personalized health care. ■ During our 60th anniversary this year, we have had much to celebrate. From 2015 to 2016, our researchers have been awarded more than \$14 million in multi-year grants to explore potential treatments for cancer, drug-resistant pathogens and other diseases. We opened our interdisciplinary Dental Specialty Center, where postdoctoral students and faculty from a wide range of specialties work as a team. ■ We also became part of the newly created Rutgers Health brand, the most comprehen-



sive academic health care provider organization in the state. For the benefit of our patients, and the future of our profession, we look forward to creating more art, and practicing more science, in the years ahead.

Sincerely,  
*Cecile A. Feldman, DMD, MBA*  
**DEAN, RUTGERS SCHOOL  
OF DENTAL MEDICINE**

## A Message from the Chancellor

The theme of this year's annual report, Art & Science, captures what we do as health care professionals: blend the art of healing with practices based in rigorous scientific research. This year, the Rutgers School of Dental Medicine celebrates the 60th anniversary of its first class – a rich tradition of combining art and science to provide the best oral health care for our patients. ■ In 2016, as Rutgers celebrates its 250th anniversary, we as health care professionals are at a turning point. The Affordable Care Act is accelerating change in the health care system. The traditional volume-based paradigm, a physician-centric system that rewards the episodic treatment of disease, is shifting to a patient-focused approach bent on keeping entire populations

healthy. ■ In March of 2016, the Rutgers University Board of Governors endorsed a new umbrella brand for all patient-facing components of the university's new health care division, Rutgers Health, and a new statewide faculty practice plan, Rutgers Health Group, which includes RSDM. Rutgers Health is forging a new model for patient-centric health care that aligns with a national conversation about improving care and its delivery while lowering costs. Dentists and other oral health care providers will play a critical role in this plan. ■ But for many years, the dedicated students, faculty, and staff of RSDM have already been working to create a healthier world. By delivering outstanding patient care, conducting leading-edge research, and providing the highest-



caliber training to health care professionals, RSDM and RBHS (Rutgers Biomedical and Health Sciences) are combining the art and science of health care to transform the lives of residents in New Jersey and beyond.

Sincerely,  
*Brian L. Strom, MD, MPH*  
**CHANCELLOR, RUTGERS BIOMEDICAL  
AND HEALTH SCIENCES**



**SYMBOLIC**

*Rutgers, The State University of New Jersey, introduced this shield for its 250th anniversary.*

# The Art of Healing A New Model of Patient Care

This year, Rutgers fused the art of patient care with the latest in scientific knowledge by introducing Rutgers Health, the most comprehensive academic health care provider organization in New Jersey. ■ “It allows the patient direct access to providers who are doing the cutting-edge research that delivers the newest tools, the most effective treatments, and the best approaches to keeping them well,” says Rutgers University President Dr. Robert L. Barchi. “The ability to translate between the research laboratory and the

clinical care environment, it’s that combination that makes this a totally different ball game.” ■ Rutgers School of Dental Medicine—including our faculty practice, Rutgers University Dental Associates, where RSDM faculty treat patients—is part of that plan. Rutgers Health encompasses the clinical components of Rutgers schools, institutes, and centers. As a single brand, it will offer an unmatched range of services to meet the needs of the whole patient.

■ “It will include dentists, pharmacists, nurses, clinical psychologists, and physician assistants all working together in a multi-disciplinary way to keep the population of New Jersey healthy,” says Executive Vice President For Health Affairs Brian Strom. ■ Approved by the Rutgers Board of Governors in April, plans for Rutgers Health include bringing together more than 1,000 Rutgers-employed providers as one faculty practice—Rutgers Health Group—by the end of 2017.

## BIG NUMBER

# 350

ON TRIAL: Rutgers supports 350 clinical trials at any given time, engaging thousands of patients and researchers seeking better ways to treat and prevent disease.

“Rutgers Health is developing one-stop shopping, where individuals can get *all their needs* taken care of in a system that’s well coordinated and interdisciplinary.”

RSDM DEAN CECILE A. FELDMAN.

■ Over the next several years, Rutgers Health will encompass the Rutgers Health Network, an integrated group of Rutgers-affiliated hospitals, community clinics, medical groups, wellness centers, and other entities collaborating to provide value-based care to patient populations across the state. “Rutgers Health is developing one-stop shopping, where an individual can get all their needs taken care of in a system that’s well coordinated and interdisciplinary,” contends RSDM Dean Cecile A. Feldman.

The new brand will help bridge the “artificial divide” between oral health care and overall wellness, she says.

### BREAKTHROUGHS AT RU

Rutgers University, which received \$677 million in research funding last year, has a long history of artistic and scientific breakthroughs. Here are a few, courtesy of *Great Things to Know about Rutgers*, published by the Rutgers University Communications and Marketing team.

#### ART : IT “HAPPENED” HERE FIRST

Known as the “Rutgers Group,” artists and professors Allan Kaprow, Roy Lichtenstein, George Segal (also a Rutgers alumnus), and Robert Watts pioneered the Happenings, Pop Art, and Fluxus movements of the 1950s and '60s that changed the avant-garde art scene forever. The world’s first Happening—an immersive art performance with audience participation—took place at Rutgers in 1958.

#### SCIENCE

The “Rutgers antibiotics” of the 1940s were a sensational breakthrough in infectious disease treatment. The word *antibiotics* was defined by professor, alumnus, and Nobel Prize-winning microbiologist Selman Waksman, who, with his graduate students, discovered antibiotics in soil microbes. Waksman and graduate student Albert Schatz discovered streptomycin, the first antibiotic to treat tuberculosis effectively. Streptomycin has saved many lives.

#### FIRST THINGS FIRST

These medical science milestones happened at Rutgers:

- First U.S. use of new technology enabling surgeons to see MRI brain scans in real time during brain surgery
- First proven connection between smoking and lung cancer
- First reporting of AIDS and pediatric AIDS
- Creation of Wong-Baker Faces Pain Rating Scale
- First to show that high doses of steroids combat multiple sclerosis
- Discovery of first gene mutation linked to Parkinson’s disease



Rutgers Health includes a broad range of care.



*A resident student and patient in our new orthodontic clinic.*

- First to pinpoint Autism Spectrum Disorder
- First major advancement in tuberculosis diagnosis in 100 years: rapid diagnosis TB test

**ONLY AT RUTGERS**

Here are a few things that make Rutgers health care unique.

- **Rutgers Cancer Institute of New Jersey** is the state’s only National Cancer Institute-designated Comprehensive Cancer Center.
- The **Robert Wood Johnson Medical School** Cardiovascular Institute of New Jersey’s Myocardial Infarction Data Acquisition System houses 25 years of data on 500,000 New Jerseyans who have suffered a heart attack. Mining this resource, researchers report an upsurge in heart attacks and strokes following Superstorm Sandy.

- **New Jersey Medical School’s Center for Skull Base and Pituitary Surgery** is one of the few centers in North America—and the only one in the state—treating previously inoperable skull base and pituitary tumors with minimally invasive endonasal endoscopic surgery, keyhole microsurgery, laser surgery, and stereotactic radiosurgery.
- Renowned for its work in the U.S. and across the globe, **New Jersey Medical School’s Global Tuberculosis Institute** is the Centers for Disease Control and Prevention’s TB Regional Training and Medical Consultation Center in the Northeast, one of only five centers in the nation to merit the designation.
- With the nation’s aging population and increasing numbers of people living with chronic illness, the demand for wound, ostomy, and continence (WOC) nursing is enormous. **The School of Nursing–Camden** offers New Jersey’s first WOC graduate certificate, satisfying this critical need in health care.

**PARTNERS IN HEALTH**

12+

*Rutgers Health includes the clinical components of these leading schools, centers, and institutes*

- Ernest Mario School of Pharmacy
- Graduate School of Applied and Professional Psychology
- New Jersey Medical School
- Robert Wood Johnson Medical School
- Rutgers Cancer Institute of New Jersey
- Rutgers School of Dental Medicine
- School of Health Professions
- School of Nursing (Newark and New Brunswick)
- School of Nursing–Camden
- School of Social Work
- University Behavioral Health Care
- Health services for Rutgers students
- Other clinical entities as determined



**DENTAL ARTIST**

*A student gets some guidance in our Dental Arts studio.*

# Perfect Composition An RSDM Education

Since it was founded 60 years ago, RSDM has excelled at teaching students to succeed in both spheres of the oral health profession—art and science. Our competency-based curriculum is known for preparing them to be versatile, expert practitioners. Unlike many schools, we require students to perform a large number of wide-ranging clinical procedures before they've met our definition of mastery. Residency directors vie for our students because their level of clinical experience is often much

higher than their peers. ■ To get a head start, students begin working in the clinic in their first year, observing and assisting third- and fourth-year students. This lets them become familiar with clinical protocol and routines before they work directly with patients. ■ The RSDM admissions process is rigorous: it values life experience, wisdom, and an outside-the-box worldview. We are national leaders in the practice of holistic admissions, which considers the totality of a student's talents

and abilities in addition to more narrow criteria, such as grade point average. ■ One of the most ethnically diverse dental schools in the nation, RSDM has also been recognized for our support of LGBTQ students. The Dental Association for Equality, a group of LGBTQ students and allies founded at RSDM, was one of only a few such groups nationwide when it began in 2012. We pride ourselves on creating an environment where different cultures and types of students are celebrated.

## BIG NUMBER

# 2.5M

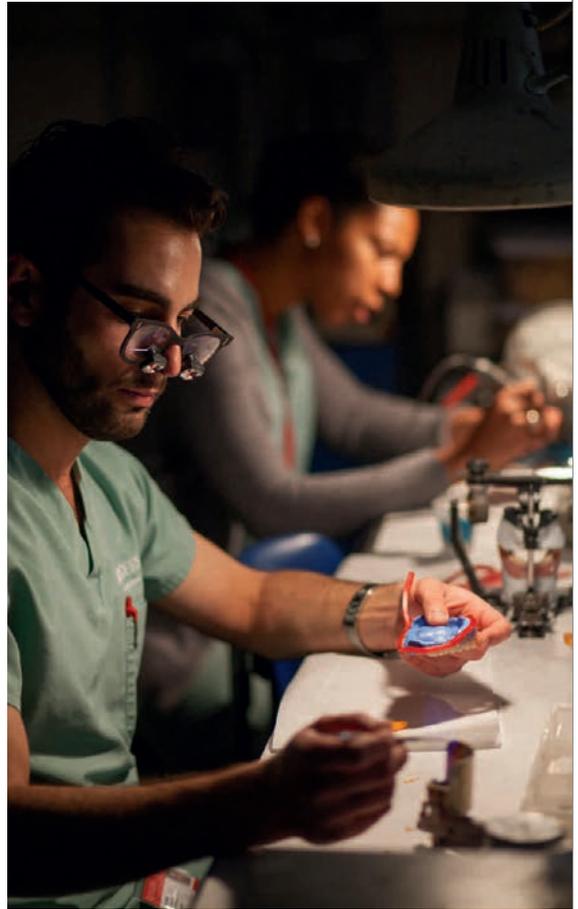
STANDOUT EDUCATION: *Created with \$2.5 million in federal funding, our From Practice To Preceptor (FP2P) program teaches professional dentists to work in academia and has trained 23 participants since it began in 2012.*

“All the fine grooves and details are expected right from the beginning. We get obsessive about that. That’s the artistic side of it. But students also learn the science behind it...”

RSDM ASSISTANT PROFESSOR  
ABHINAV WADKAR

DENTAL IMPRESSIONISM

Artists create with paint, clay, and canvas. For dental students, the materials are melted wax, porcelain, and dental alginate.



“By ‘diversity,’ we don’t just mean ethnic and racial diversity; we mean geographic diversity and also diversity in terms of age. Several of our students chose dentistry after succeeding in a previous career,” says Rosa Chaviano, RSDM assistant dean of admissions and student recruitment.

Standout educational efforts at RSDM include our From Practice To Preceptor (FP2P) program, which was designed with \$2.5 million in federal funding. The program teaches professional dentists to work in academia and has trained 23 participants since it began in 2012. Our pre-dental immersion program, Gateway to Dentistry, is a national model that exposes college students to the daily life and lessons of dental school.

2015-2016 STUDENTS

Fall 2015 entering class (Class of 2019)

1,898 89

APPLICANTS

MATRICULATED

Match Day Rates

90%

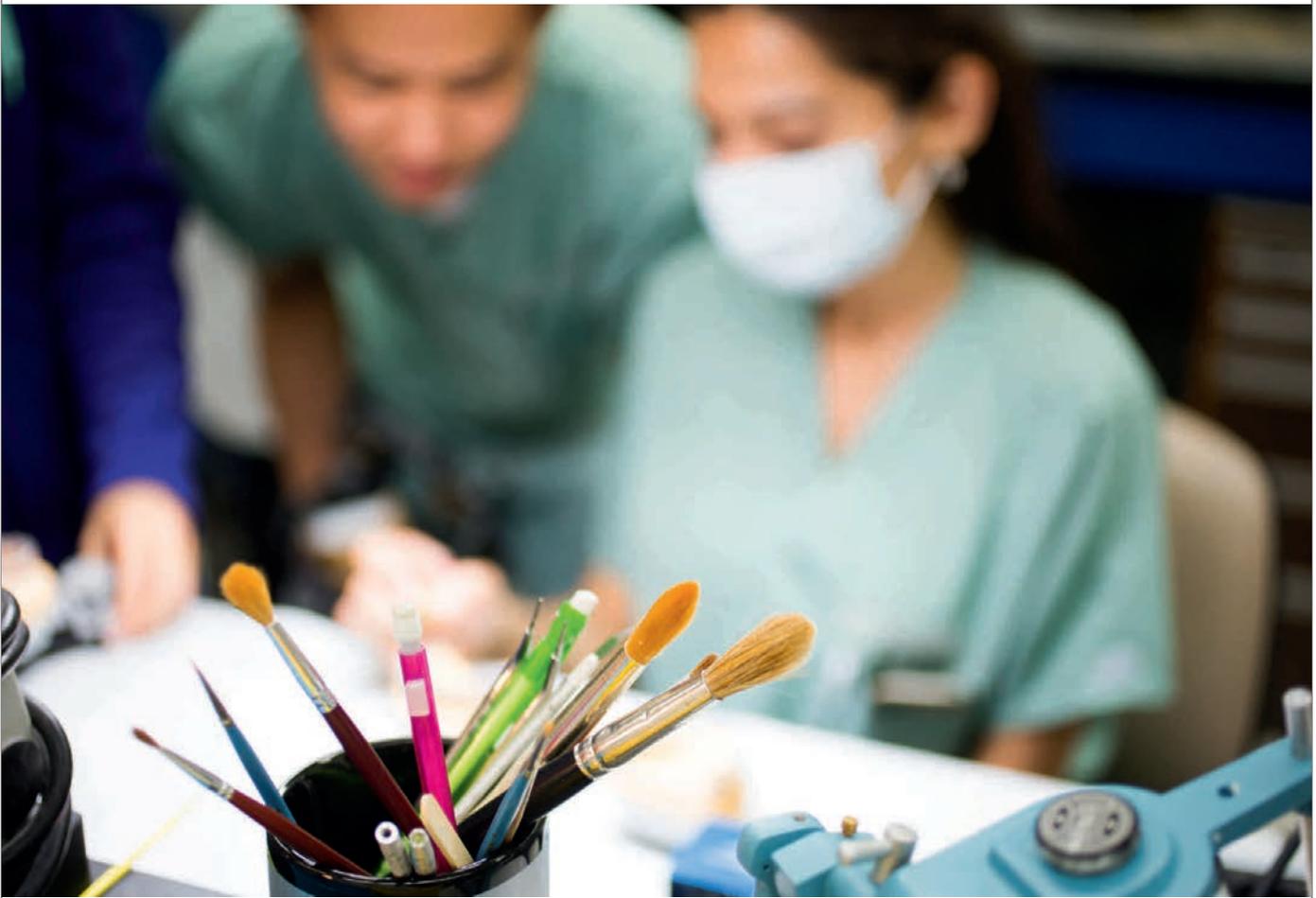
FIRST-YEAR

First-time pass rates for the National Board exams

99% 90.1%

PART ONE

PART TWO



Their artistry is developed in preclinic, where first- and second-year students learn the “hand skills” and science needed to practice dentistry. It all starts with dental anatomy class, where one of the first lessons is “waxing a tooth”—the process of replicating all 32 human teeth, from molars to incisors.

“All the fine grooves and details are expected right from the beginning. We get obsessive about that,” says RSDM Assistant Professor Abhinav Wadkar. “That’s the artistic side of it. But students also learn the science behind it: the dimensions and features of the tooth and how it functions by itself and in conjunction with other teeth.”

Students practice their skills in the dental arts studio. Here, they’re supervised by support technologist Eva Bober, who provides hands-on help. After students have mastered the art of waxing, they make their first crown, then move on to bridges, partial dentures, and, finally, full dentures. A full set is the greatest challenge because the patient has no teeth on which to base the work.

“For most people, their only exposure to the process of dentistry is the final product,” says Wadkar. “They don’t see all the hard work that goes into it.”

#### CARICATURES OF THEMSELVES

The professor was depicted as a character from *The Simpsons*, seated on the family couch next to little sister Maggie. Students immediately recognized him as Dr. Steven Singer, chair of RSDM’s Department of Diagnostic Sciences.





*Patient Bernice Dargen*

The affectionate portrait is the work of Brian Meulener, a Class of 2016 graduate. It's one of 40 faculty caricatures he created this year.

Before he enrolled at RSDM, Meulener was a professional artist and illustrator. But he grew dissatisfied with his job at an ad agency, where he worked on ads for pharmaceutical companies, and longed to do something new. "It was too corporate," he explains.

His father, Carlos Meulener, a dentist—and 1979 RSDM graduate—inspired Brian to give dentistry a try.

A good caricature, says Meulener, is challenging because it must exaggerate the subject's most defining characteristics without being unflattering or snarky.



*Tubes of dental composite material in different shades.*

For Meulener, some subjects are easy to caricature, while others are more elusive. "Some have characteristics that are so unique, you can get it right away," he explains. "Other people—I can draw them over and over, and it'll never look like them. The ones you get in under a minute are always the most successful."

The patchwork of portraits was a tribute to his instructors and a parting gift before he graduated in May. "All of these faculty members—you spend so much time with them. You really get to know them," he says. "They have each helped shape us as dental students. I appreciate all they have taught me."

“All of these faculty members—you spend so much time with them. You really get to know them. They have helped shape us as dental students.”

BRIAN MEULENER, CLASS OF 2016

After graduation, Meulener plans to work at his father’s practice in Little Silver. But he’ll also continue to create art, just as he did in dental school.

WORK OF ART

Since 1980, Bernice Dargen had no top teeth. Without much time or money for dental work, she had

them extracted when they began to decay years ago.

As a result, eating was difficult for Dargen. Sometimes, when she laughed, she caught herself covering her mouth.

“I was embarrassed,” she says.

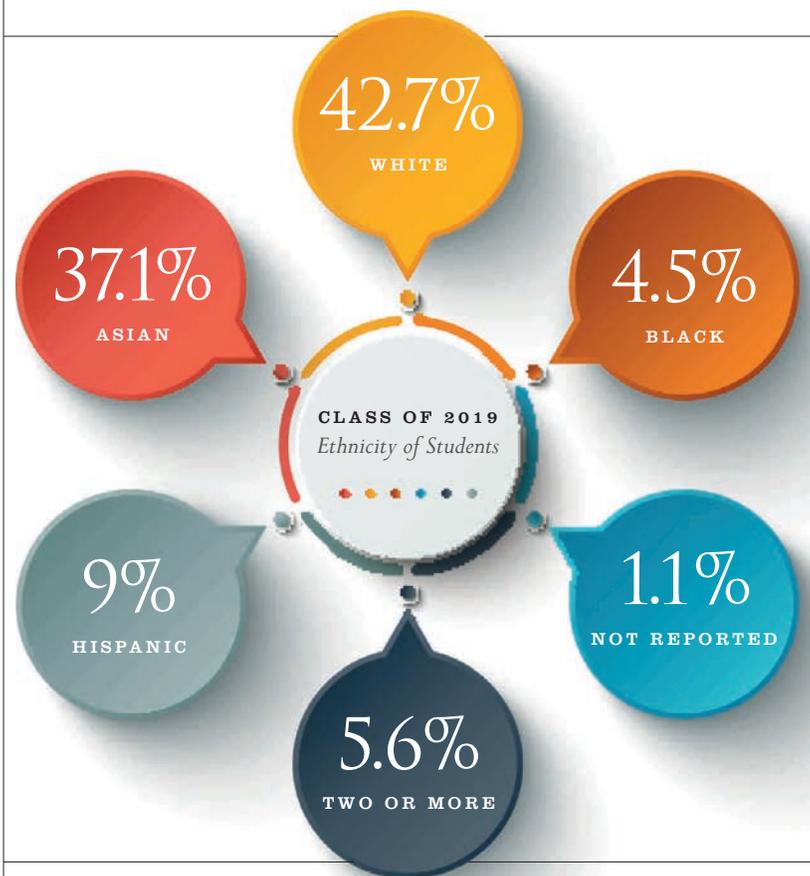
Earlier this year, she scheduled an appointment with Maksim Ndoj, an international student who had

practiced in Albania before enrolling in RSDM’s two-year Internationally Trained DMD program, which helps qualified dentists educated outside the U.S. and Canada earn dental degrees. After graduating, they are qualified to acquire a license, allowing them to practice in the U.S.

Known by other students for his prosthodontic artistry, Ndoj made a symmetrical, polished set of dentures that were beautifully proportioned to Dargen’s face.

They arrived just in time for Dargen’s family reunion, where she could show them off. “I think they look good,” she says with a grin.

Ndoj is proud to have crafted something that not only allows Dargen to eat her favorite foods again, but has helped restore her confidence. “I like seeing people smile,” Ndoj says.





**WELL CAST**

*Dr. Louis DiPede created a cast of this ear during the process of making a prosthetic for a patient.*

# Portraits in Patient Care Special Treatment for All

A perfectly executed dental filling or flawless implant may be a work of art, but the real masterpiece is a happy, healthy patient. For our faculty and students, that's the ultimate goal—one that's attained hundreds of times a day at our clinics. ■ Last year, RSDM received more than 120,000 visits from patients, making it the state's largest oral health care provider. As faculty at Rutgers, one of the nation's leading research institutions, our doctors stay abreast of the latest treatments and tech-

niques. ■ One of our greatest strengths is the ability to provide interdisciplinary care under one roof across a wide range of specialties, from periodontics to oral surgery. In April 2016, we opened our dental specialty center thanks to a \$10 million grant from the state and \$3 million in matching funds. It not only provides an invaluable, cutting-edge training ground for our postgraduate students, it has improved care and added convenience for patients. ■ In the fall of 2016, our faculty practice,

Rutgers University Dental Associates, will add a New Brunswick office to our existing Newark practice. Both locations provide state-of-the-art dental care directly from Rutgers faculty in a private practice setting. Our practitioners include internationally renowned dentists, researchers, and specialists who offer a full range of care from general dentistry to the latest treatments for those with complex special needs. ■ At RSDM, we operate one of the few clinics in the region for patients with

## BIG NUMBER

# 120,000

LAST YEAR, Rutgers School of Dental Medicine received more than 120,000 visits from patients, making it the state's largest oral health care provider.

“Our surgical, prosthetic, and facial pain specialists *practice in harmony* to provide a normal, healthy life for patients with facial and dental deformities.”

DR. SHAHID AZIZ  
ORAL AND MAXILLOFACIAL SURGERY

a wide range of disabilities, including autism, cerebral palsy, and mental disorders. The Delta Dental of New Jersey Special Care Center, which also treats geriatric patients, addresses the widespread shortage experienced by a population that often receives scant or inadequate dental care.

Our Center for Temporomandibular Disorders and Orofacial Pain is staffed by top specialists and researchers who care for patients with difficult cases involving migraines, temporomandibular joint disease, and other

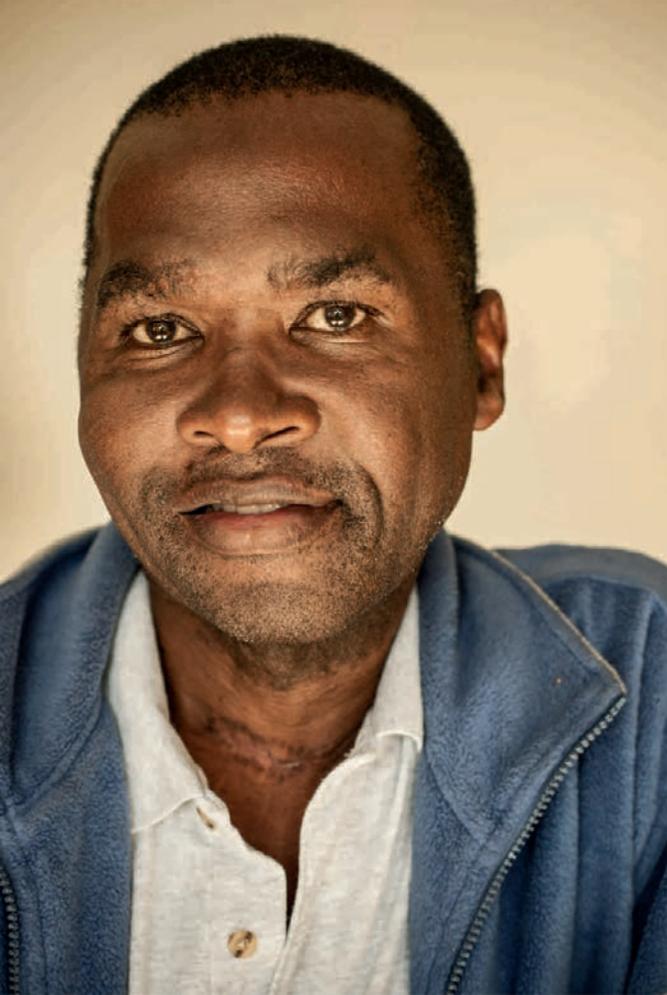
types of chronic pain. Many were misdiagnosed before receiving successful treatment at the center.

#### FINDING HOPE

After immigrating to the U.S. from Kenya, where he had been a psychologist, Samuel Nyamwange worked in New Jersey as a parking attendant to make ends meet.

One night on the job, he was shot in the face during a robbery.





*Patient Samuel Nyamwange*

Nyamwange survived, but the bullet shattered his teeth and jaw and destroyed the roof of his mouth. In addition to coping with his facial disfigurement, he couldn't eat or speak and suffered from chronic facial pain. He was convinced he would never be able to live a normal life again. "I lost hope," says Nyamwange, age 55.

Two years later, after treatment by a team of RSDM physicians, Nyamwange looks like his old self. He can eat again, and his speech is the same as it used to be. In addition, his chronic pain has disappeared.

RSDM physicians in our faculty practice, Rutgers University Dental Associates, worked together to heal him. In the first phase of treatment, Dr. Shahid Aziz, an oral and maxillofacial surgeon, worked to repair Nyamwange's facial fractures. Multiple surgeries followed, involving reconstruction of hard and soft tissue that had suffered defects from bullet wounds.

Working with Dr. Lou DiPede, a maxillofacial prosthodontist, and Dr. Chan Park, an ENT surgeon, Aziz reconstructed the roof of Nyamwange's mouth with dental implants created from bone in the patient's leg. During the final phase of surgical treatment, Nyamwange received a prosthetic jaw joint so he could open and close his mouth. DiPede created dentures and an obturator

prosthesis, which temporarily replaces the roof of the mouth, allowing Nyamwange to eat and drink again.

Dr. Gary Heir, clinical director of the Division of Orofacial Pain, discovered that Nyamwange's headaches and other symptoms—including watery eyes and nasal congestion—had been caused by a rare form of nerve damage the patient had suffered during the shooting. He prescribed medication that stopped the pain.

It's this kind of advanced, collaborative care that distinguishes Rutgers University Dental Associates. "We work together to help patients with complex needs like Sam," says Aziz. "Our surgical, prosthetic, and facial pain specialists practice in harmony to provide a normal, healthy life for patients with facial and dental deformities."

As his treatment winds down, Nyamwange says he's regained his faith in the future. "They kept promising me I'd be like new," he says. "And now I see why."

#### MASTER OF ILLUSION

**I**f Dr. Lou DiPede has managed to fool you, he's done a good job. DiPede creates maxillofacial prosthetics—



*Close-up view of an implant screw*

Patients receive better care when communication among providers is improved, and the clinic's *open environment*, designed to foster dialogue, results in a better experience.

artificial eyes, ears, noses, and other facial parts—for patients who have lost them to disease or trauma.

“When you have a defect in your body, you hide it with clothing, but when it’s your face, you can’t. It’s how you interact with the rest of the world,” he says.



Thanks to DiPede’s painstakingly customized prosthetics, his patients can attend church, shop for groceries, or go to school without drawing stares. “Without them, some people become recluses and never go out,” says DiPede, an RSDM alumnus who received his prosthodontic training at Memorial Sloan Kettering Cancer Center.

Often working from patient photos, DiPede uses silicon and special paints to duplicate the exact shape and coloring of the missing facial part. Sometimes he’ll make more than one prosthetic to mimic the way skin tone can change with the season. He strives to capture every detail. “It’s not only the base skin tone but the little nuances, freckles, or moles that you have to get right—the ‘perfect’ imperfections—so that you try and fool the casual observer,” he says.

One satisfied patient paid him one of the profession’s highest compliments, recounting how her priest saw her at Mass and exclaimed, “You got your new nose! It looks just like your old nose.”

Says DiPede, “It’s rewarding to replace teeth and improve esthetics, but it pales in comparison to giving someone back their ability to go out into society again.”

#### STATE OF THE ART

When specialists offer team treatment within one clinic, patients benefit from the convenience and provider collaboration. That’s the mission of RSDM’s new dental specialty center, which opened in April 2016.

The center, designed for postdoctoral students earning their residencies, is located on the school’s Newark campus. It includes 80 new dental operatories and seven surgical suites for teaching advanced implantology, periodontal surgery, endodontic surgery, maxillofacial prosthetic dentistry, and advanced restorative dentistry.

“Interaction among departments and disciplines is essential to treat and solve the complexities of oral diseases,” says Dean Cecile A. Feldman. “The center

#### BIG NUMBER

# 80

TEAM TREATMENT: *The new dental specialty center includes 80 new operatories and seven surgical suites for teaching advanced implantology, periodontal and endodontic surgery, maxillofacial prosthetic and advanced restorative dentistry.*

will have a far-reaching effect on the school's capacity for innovation."

Patients receive better care when communication among providers is improved, and the clinic's open environment, designed to foster dialogue, results in a better experience for them, say staff. Dr. Craig Hirschberg, interim chair of the Department of Endodontics, describes the changes. Rather than sending patients with multiple needs to another department—where they would have to make an appointment and sometimes wait while in pain—they don't have to leave the chair. A nearby specialist can walk over for a quick consultation. "It saves the patient time and can spare them a lot of discomfort," says Hirschberg.

The center, which cost \$13 million, including \$3 million to match a state grant, features the latest technology for teaching and collaborative, practice-based research. It includes new digital radiography, an electronic health records (EHR) system, and cutting-edge



classroom technology, including new endodontic microscopes that can capture video and digital images for continuing-education courses and case studies.

Both new and longtime patients have given the center glowing reviews. "They say, 'Wow, this place looks fantastic,'" Hirschberg recounts. "I think it makes patients feel special."



BIG NUMBER

# \$13M

RSDM's new dental center

*RSDM's new dental specialty center includes new digital radiography, an electronic health records (EHR) system, and cutting-edge classroom technology, including new endodontic microscopes that can capture video and digital images for continuing-education courses and case studies.*







**UNIVERSAL LANGUAGE**

*A smile needs no translation. RSDM serves patients at home and overseas.*

# Lasting Imprint Serving Others Worldwide

**F**or millions in New Jersey and around the globe, oral health care is unaffordable and inaccessible. At RSDM, we're on a mission to change that. We treat a multitude of underserved patients locally and internationally, providing a safety net for many who would otherwise go without desperately needed treatment. ■ Forty percent of our patients receive Medicaid, which many dentists do not accept. Our Brunsdon-Villa Pediatric Dental Center received nearly 7,000 patient visits last year, including many children

from Newark, one of the most economically disadvantaged cities in the state. Thirty percent of its residents live below the poverty line. ■ At RSDM, students gain a deep understanding of health care disparities and how they affect populations at home and abroad. We have one of the only clinics in the region that specializes in treating patients with disabilities, including geriatric patients and those with autism, cerebral palsy, and mental disorders. RSDM has also been a pioneer in dental treatment for HIV/AIDS

patients. In 2002, we received federal Ryan White funding to become one of 12 community-based dental partnership programs designed to increase access to oral health care for clients in underserved areas. ■ At our Community-Oriented Dental Education (CODE) program in South Jersey, students spend much of their fourth year in a private-practice setting, treating many disadvantaged patients. In addition to their daily experiences in our clinics, students are required to perform four hours

## BIG NUMBER

# 7,000

ON A MISSION: *Our Brunsdon-Villa Pediatric Dental Center received nearly 7,000 patient visits last year, including many children from Newark, one of the most economically disadvantaged cities in the state.*

of community service. Some volunteer at our annual oral cancer screening event or work with survivors of domestic violence and drug abuse, educating them about oral health care. Every February, we celebrate national Give Kids a Smile Day by providing free dental screenings and fluoride treatments to schoolchildren in Newark, nearby towns, and our extramural clinics in South Jersey.

### GLOBAL VILLAGE

From a Southwestern Native American reservation to a village in Bangladesh, our students embark on annual out-of-state and overseas dental missions. Here are a few:

- RSDM is one of the only dental schools in the country to work with the federally run Indian Health Services, staffing its dental clinic in Red Mesa, Arizona. Since 2004, our faculty and students, led by Dr. Robert Shekitka, have spent two weeks there, treating thousands of patients who live on Native American reservations.
- RSDM oral surgery residents, led by Dr. Shahid Aziz, visit a village in Bangladesh twice a year to perform cleft palate surgery. In the U.S., this surgery is commonly performed during infancy. But in Bangladesh, there is a

severe shortage of qualified surgeons, so many people live into adulthood with the disfigurement. In 10 years, Aziz and his team have treated more than 1,000 patients.

- Underprivileged patients from Haiti and the Dominican Republic receive free dental care during RSDM's annual Cheerful Heart mission. Led by Professor Pamela Alberto, the team sets up a clinic in the rural village of Restauración, Dominican Republic. There, they also treat residents from nearby Tilorí, Haiti. Since 2011, the team has treated thousands of villagers who have little or no access to dental care the rest of the year.

### A PICTURE OF HEALTH IN CHINATOWN

In New York's Chinatown, finding a dentist can be daunting for residents. "A lot of times, they don't know that clinics are available for health care. Even making them aware that this is an option is helpful," says Nicole Viola, president of RSDM's Asian American Dental Club.

Each year, the club makes two visits to Chinatown, one stop is a local YMCA health fair and another is the Myanmar Water Festival. Both trips are led by Dr. Fanny



*On our Smile Bangladesh mission, RSDM faculty and post doctoral students perform cleft palate and cleft lip surgeries.*



Left, the team from our dental mission to the border of the Dominican Republic and Haiti. Right, a student examines a patient at Rutgers Community Health Center in downtown Newark.

Moy, a professor at RSDM. “The primary difficulty for residents is that they don’t speak English. It helps that we have Mandarin speakers. That breaks the barrier,” says Viola.

During events, club members educate children and adults about oral health care, showing kids proper tooth brushing methods and giving tips to elderly residents. The health fair event also includes a dental screening. “For many people, oral health isn’t an issue until it becomes a problem,” said club member Vicky Vergara. “For us, this is our way of sharing with the community.”

#### COLLABORATION IS KEY

RSDM students are serving more Newarkers in need of dental care, thanks to nearly \$2 million in federal funding awarded last year. At Rutgers Community Health Center in downtown Newark, dental students work with nursing students, medical students, social work students, and others, screening patients and teaching them about healthy teeth and gums.

This is the first year the clinic, founded in 2012 and run by the School of Nursing, has worked with RSDM as part of a formal program. “They knew there was a tremendous need for oral health care education,” says Senior Associate Dean for Academic Affairs Kim E. Fenesy, the principal investigator for the grant. “It was so pointedly lacking. Before, if their patients had dental needs, they didn’t know what to do. We’ve established a relationship with them so that now they realize we’re a primary source of referral for their patients.”

Not only are patients benefiting from the program, funded by the U.S. Health Resources and Service Admin-

istration, but students from all disciplines are learning about the importance of interprofessional teamwork.

“I’ve gotten feedback from other students in the program where they say, ‘I had no idea that’s what dentists do.’ Students from other health professions now know the importance of dentistry to the overall health of a patient,” Fenesy said.

Third-year student Andrea Kohanchi appreciates the chance to learn about the health needs of city residents and help them get proper treatment. “We’re hoping that more people who need dental care can get it,” she says.

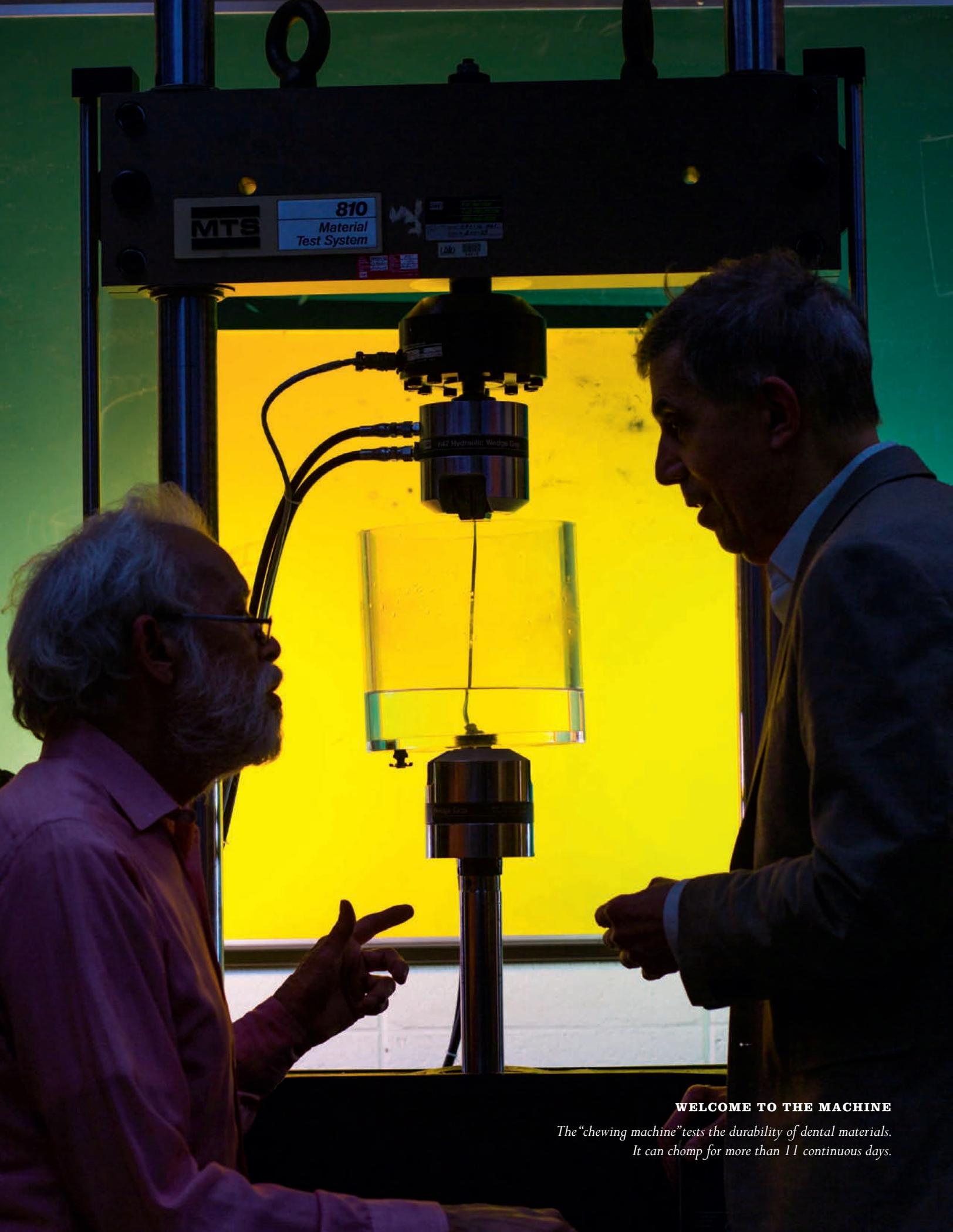


RSDM’s Asian American Dental Club makes annual trips to New York City’s Chinatown to teach residents about oral healthcare.

#### BIG NUMBER

\$2M

SERVING MORE IN NEED: At Rutgers Community Health Center, RSDM students are serving more Newark residents in need of dental care, thanks to nearly \$2 million in federal funding awarded last year.



**WELCOME TO THE MACHINE**

*The “chewing machine” tests the durability of dental materials.  
It can chomp for more than 11 continuous days.*

# Eureka Moments The Art of Science

**R**esearch, like great art, is driven by imagination. At RSDM, our research faculty's creativity has yielded breakthrough methods of treating illness, easing pain, and testing dental products and materials. We have discovered stunning disease-fighting powers in microorganisms found in the oral cavity, resulting in more than \$14 million in multi-year grants for fiscal years 2015 and 2016. ■ At our Center for Oral Infectious Diseases, researchers have explored how bacteria drawn from the mouth can

help battle cancer and so-called "predatory" bacteria can devour drug-resistant pathogens. They have also made great discoveries in the fight against caries and periodontal disease. In the past year, RSDM oral biologists have studied the genetic causes of gum disease in hopes of finding a cure. They have also received funding for clinical studies from Colgate-Palmolive and other companies, testing products that improve oral health. ■ Researchers at our Center for Orofacial Pain examine how the body

perceives and processes pain, and how pain can be alleviated. They work with patients, applying new treatments based on their findings and offering relief to many who have been misdiagnosed repeatedly. Faculty include internationally renowned specialists who have been instrumental in creating new diagnostic codes for various types of chronic pain. ■ Other researchers at RSDM have studied the prevention and treatment of medication-related osteonecrosis of the jaw (MRONJ), a severe bone disease that strikes

## BIG NUMBER

# 2,000

ON-THE-SPOT RESEARCH *For nearly a decade, Dr. Daniel Fine and his team have worked with more than 2,000 adolescents in Newark, monitoring them for signs of LAP at six-month intervals.*

“In *art and science*, you have to be able to suffer through the time and effort it takes to get to the *point of discovery*. You have to be as in love with the process as you are with the result.”

DR. DANIEL FINE, HEAD OF  
RSDM'S DEPARTMENT OF ORAL BIOLOGY

cancer patients as a side effect of medication and radiation treatment. We also provide many opportunities for students to complete research, including a newly funded program that allows fourth-year predoctoral students to spend 60 hours pursuing oral health-related research.

#### SOMETHING TO CHEW ON

Professor Allyn Luke oversees the “chewing machine,” a device that tests the hardness of implant screws and dental materials by simulating real-life wear and tear.

The digitally controlled machine, one of only two in the nation, can chomp on specimens for as long as 11.6 days, or “six million cycles.” That can tell researchers whether a screw is likely to come loose or an amalgam filling has a greater potential to crack than another type of material.

Luke, a nationally known expert who has taught concrete design at New Jersey Institute of Technology, came to RSDM in the 1990s as a volunteer. For more than 30 years, the civil engineer had worked for the New Jersey Department of Transportation, researching and testing the state’s roads for safety. He believes he is the only person in the U.S. who has tested the strength of both a 1,000-foot highway and a dental bridge.

Because concrete and dental materials are similar—both are brittle, composite materials prone to crumbling—Luke is well-suited to test both. The chewing machine, technically known as a biaxial, closed-loop,

servo-hydraulic system, is the same kind of machine he used during more than 27 years of concrete research. It is associated with technology also used in the aerospace and automotive industries, says Luke. “It’s called ‘torque-angle analysis,’” he explains.

Luke has worked at RSDM since 1998, researching materials for the Department of Restorative Dentistry with help from Professor Saul Weiner. Since he began his research at RSDM, Luke, along with postgraduate restorative students, has focused much of his attention on implant screws, which often loosen after insertion, causing problems for patients. The team has discovered that short, fat screws tend to stay tightened longer than screws that are thinner and more elongated. They have published several peer-reviewed papers on their findings.

This year, the Restorative department received \$60,000 in funding to upgrade the chewing machine’s 1990s technology with a new digital controller. Luke and Weiner will continue the research they began last year with the Rutgers School of Engineering. “We’re working on a new generation of dental materials that are more durable, less expensive, and easier to make,” Luke says.



The chewing machine tests the strength of dental materials, including implant screws.



#### RESEARCH ON WHEELS

*This van will help Dr. Daniel Fine and his team research a rare gum disease.*

#### VAN, GO

A shiny scarlet van helps RSDM researchers develop potential treatments for a rare form of gum disease that affects African-American adolescents. The van, delivered to the dental school this year, will travel to schools in Newark and neighboring towns, collecting saliva samples for an NIH-funded study of localized aggressive periodontitis (LAP), which occurs in two percent of African-American children ages 11 to 17.

Because the disease affects central incisors and molars, it can result in disfiguring tooth loss and difficulty eating among a demographic that has limited access to dental care. The research team led by Dr. Daniel Fine, head of RSDM's Department of Oral Biology, is working to increase the possibility of detecting LAP before it causes loss of teeth and bone. Fine has received \$3.2 million, which includes the cost of the van, from the NIH for the study.

For nearly a decade, he and his team have worked with more than 2,000 youths in Newark, monitoring them for signs of LAP at six-month intervals. The van, branded with the RSDM logo and our new advertisement on the back panel, helps the team continue its work. Although the study's mission isn't to treat patients, the



*Researcher Scott Kachlany, Ph.D.*

*Research opportunities* include a newly funded program allowing fourth-year *predoctoral students* to spend 60 hours pursuing oral health-related research.

van includes a dentist's chair and other equipment in case on-the-spot treatment is necessary.

#### NEW STYLE OF CANCER TREATMENT

Nearly a decade ago, RSDM researcher Scott Kachlany found a potential treatment for cancer in an unlikely place: saliva. The same oral bacterial protein that can cause periodontal disease, resulting in loss of bone and teeth, has been proven to kill leukemia cells in animals.

Kachlany also discovered that the protein could be an effective treatment for autoimmune inflammatory diseases, including rheumatoid arthritis, multiple sclerosis, and Crohn's disease. An associate professor in the Department of Oral Biology, Kachlany patented the protein as Leukothera and founded a company, Actinobac Biomed,

to begin developing it as a treatment for cancer.

In 2014, he received a \$1 million grant from the NIH to fund the process of obtaining U.S. Food and Drug Administration approvals. Last year, Kachlany signed a licensing agreement with a veterinary pharmaceutical company to create potential medications for treating livestock and companion animal diseases. The deal allows Elanco Animal Health, a division of Eli Lilly and Company, to use Actinobac's patented technology. With the NIH funding, Kachlany's company is in the midst of performing preclinical studies that will allow testing to begin on humans, possibly within the next two years.

#### MICROPREDATOR

Researcher Daniel Kadouri is determined to help end a global health threat: overreliance on antibiotics,



Researcher Daniel Kadouri, Ph.D and an image of the predatory bacteria he studies: *Bdellovibrio bacteriovorus*.



which has resulted in an increase in untreatable illnesses.

Last year, with help from a cooperative agreement for up to \$7.2 million from the U.S. military, Kadouri continued his study of predatory bacteria that devour germs impervious to antibiotics. The first is *Bdellovibrio bacteriovorus*, which penetrates prey and kills from within. The second, *Micavibrio aeruginosavorus*, is a vampirish organism that devours germs from the outside.

In addition to eradicating bacteria that cause lung disease and killing germs that develop from wounds and burns, the predatory bacteria fight food-borne pathogens like *E. coli* and *Salmonella*.

Related studies carried out by Kadouri have been funded by the Department of Defense and the U.S. Army since 2009. Over the years, he and his team have delved deeper into research that explores how animals are affected by the predatory bacteria—and how effectively the bacteria combat illnesses and infection in animals.

Kadouri has collaborated on the study with Rutgers New Jersey Medical School Professor Nancy Connell, director of research in the school's Division of Infectious Disease, and researchers at the University of Pittsburgh,

Walter Reed Army Institute of Research, and the Hebrew University of Jerusalem.

#### FEELING NO PAIN

Dr. Rafael Benliel calls chronic pain, which afflicts more than 100,000 million people worldwide, “the silent epidemic.” For many, it’s exacerbated by an addiction to opiates, which can heighten sensitivity to pain once the analgesic effect wears off, according to Benliel, director at RSDM’s Center for Orofacial Pain and Temporomandibular Disorders.

In search of alternative pain relief methods, Benliel is studying a specially tailored microorganism that can be injected into patients to treat facial pain. The so-called designer molecule, which introduces a receptor into the brain, has shown signs of being effective in preliminary studies on rats, he says.

“If we activate it, it modifies their pain,” says Benliel, who is conducting the research with Dr. Gary Aston-Jones, director of the Rutgers Brain Health Institute.

This year, the team received \$40,000 in funding from the Rutgers Community Health Foundation to start an early phase of the study, which they hope to expand.



**THE GRADUATES**

*RSDM grads at the 2016 Rutgers University commencement ceremony, where President Barack Obama gave the keynote address.*

# Patrons and Professionals

## The Value Of Alumni

Our close network of alumni and colleagues provides so much to RSDM: time, financial support, expertise, and a wealth of opportunities. They are faculty members and dental professionals who return to share their knowledge. They are donors who have generously endowed scholarship funds and enabled us to build the best facilities in the state for patient care and research. ■ For the state's dental professionals, RSDM is where they can develop their own skills and knowledge. Our Continuing Dental Education program offers cutting-edge

presentations, like this year's Interdisciplinary Seminar, where discussions explored the latest in general dentistry and specialties. Speakers emphasized evidence-based treatment and innovative, interdisciplinary techniques for complex cases. ■ We are also one of a handful of institutions worldwide that offer the American Academy of Implant Dentistry's Implant MaxiCourse, which shares the field's newest advances. Last year, 100 percent of our participants passed the written portion of the exam.

**THE ART OF GIVING**  
As the son of Holocaust survivors, Dr. Howard Drew has learned that gratitude can bring joy. "Survivors are often either incredibly sad or incredibly happy, and I found my parents to be so happy to be alive and have a family that they had a very positive outlook," says Drew, an RSDM faculty member and a Class of '82 alumnus. "They never felt entitled to anything." ■ That same world view has shaped the philanthropic efforts of Drew and his wife, Ina. For many years, they have supported

### BIG NUMBER

# 100%

**CUTTING-EDGE ADVANCEMENTS** Last year, 100 percent of RSDM participants passed the written portion of the exam for the American Academy of Implant Dentistry's Implant MaxiCourse.

*“When you give at our age, your children and your family appreciate it ... It’s nice to have a legacy while you’re alive and you can see the impact it has.”*

DR. HOWARD DREW, '82, DEPARTMENT OF PERIODONTICS

institutions where they and their children received an education.

Since the 1980s, the Drews have given generously to RSDM, donating student scholarship monies, funding a cone beam machine, and, most recently, creating a gift fund for the school’s new dental specialty center, which opened in April. The postgraduate center houses four specialties and is filled with innovative technology and the spirit of collaboration. “It’s a

fantastic place,” exclaims Dr. Drew, a clinical professor in the Department of Periodontics. “It’s the ideal way students should learn.”

Adds Ina Drew, “We like to give to development projects that can make a difference in the future of education.”

Dr. Drew, who has been teaching at the school since 1985, clearly loves his job. “To be around young people who have such a thirst for knowledge and [to] practice in your field with them is just amazing,” he says enthusiastically.

Although Ina Drew forged a career in banking, dentistry runs in the family. The couple’s son, Alexander, is Chief Resident in prosthodontics at Columbia University. Their daughter, Sarah, a Barnard graduate, previously worked at *Vanity Fair* before relocating with her husband, a dentist in the U.S. Navy.

“When you give at our age, your children and your family appreciate it and learn how important it is,” says Dr. Drew. “It’s nice to have a legacy while you’re alive and you can see the impact it has.”

#### BEHAVIORAL SCIENCE

Before he became a dentist, Dr. Shaun Massiah majored in anthropology.

It comes in handy when he’s treating patients. “We try very hard in anthropology not to be judgmental,” says Massiah, who graduated from RSDM in 1997. “You see people as they are and not as you want them to be.”

He mentions a recent 19-year-old patient with tongue piercings. It’s not a fashion choice Massiah would make, but he seized the opportunity to educate. “I just told him that tongue rings can destroy your teeth because when you talk, the balls hit against your teeth and chip at them over time.”

Massiah, who has a practice on Manhattan’s Upper West Side, believes that by learning about his patients’ goals and values he can give them better care. “I want to know what works for you and your lifestyle.



*Ina and Dr. Howard Drew, Class of '82*



*Dr. Shaun Massiah, Class of '97*

How were you raised? It's not as straightforward as filling cavities. There's a socioeconomic piece to helping someone have a healthy mouth," he explains.

Massiah, 47, was raised in Guyana, where there were no dental schools, and immigrated to the U.S. at age 17. When it was time to choose a profession after college, he thought of the volunteer dentist he had visited as a child. "I had a bad toothache; I was crying. And he was so compassionate. I was very moved by that," he says.

As a professional in a field where black men are still in the minority, Massiah shares his experiences and perspective with younger dentists. He recently spoke to members of the Student National Dental Association at RSDM about the importance of networking and researching the business end of dentistry. "We have so many chances to collaborate with dentists all over the world," he says. "Dentists aren't alone like they used to be. There's so much more to learn."

#### MOLDING THE FUTURE

**D**r. Nathalie Scarpa-Lota still remembers her first great success as an RSDM student more than two decades ago. Her patient, an elderly nun named Sister

Marie Camillo, needed a three-unit bridge. "My professor was the famous Dr. Nicholas. He was very tough, and he approved. Anything you could finish with him was good," she says with a laugh.

Lota, Class of '91, is also demanding as a faculty member. But her own memories of dental school have fostered a sense of compassion for her students. "When they make mistakes I just quietly talk to them and reassure them that this has happened before; [they're] not the first person who's done this. As long as the patient's OK, that's the most important thing," she says.

Since 2012, Lota has been a faculty member in the Department of Restorative Dentistry. She feels that teaching is her true calling. "I love the moment a student cements their first crown or delivers their first set of dentures, and the patient looks at it and cries because they're so happy. Every day I see that, and that's what makes this so rewarding," she says.

As faculty, Lota believes the most important concept she can teach her students is to respect the dignity of each patient. "I want them to think about the person, not just the procedure," she explains. "It's important just to say hello and make eye contact. It's not always easy to come here, and that makes people feel welcome."



*Dr. Nathalie Scarpa-Lota, Class of '91, with a student*



1.

2.

3.

4.



# RSDM

## Administrators

### Fulfilling Our

### Mission

The

he associate and assistant deans, department chairs and senior administrators make up our Administrative Council, headed by Dean Cecile A. Feldman. In addition to their duties at Rutgers School of Dental Medicine, most of them belong to a variety of professional organizations and hold elected or appointed offices.

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Interim Chair, Department of Endodontics

**DANIEL FINE**  
DMD  
Chair, Department of Oral Biology

**MICHAEL CONTE**  
DMD, MPH  
Senior Associate Dean for Clinical Affairs

**JOAN LILJEGREN**  
MEd  
Director of Development

**VINCENT ZICCARDI**  
DDS, MD  
Chair, Department of Oral and Maxillofacial Surgery

2.

**NARAYANAN RAMASUBBU**  
PhD  
Assistant Dean for Research

**RAFAEL BENOLIEL**  
BDS  
Associate Dean for Research

**ANDREW SULLIVAN**  
DDS  
Interim Chair  
Department of Periodontics

**KIM FENESY**  
DMD  
Senior Associate Dean for Academic Affairs

3.

**STEVEN SINGER**  
DDS  
Chair, Department of Diagnostic Sciences

**ROSA CHAVIANO**  
DMD  
Assistant Dean of Admissions and Student Recruitment

**STEVEN MORGANO**  
DDS  
Chair, Department of Restorative Dentistry

**JILL YORK**  
DDS, MAS  
Assistant Dean for Extramural Clinics

4.

**VINCENT NACCO**  
Executive Director of Finance

**CECILE A. FELDMAN**  
DMD, MBA  
Dean, Rutgers School of Dental Medicine

**CHRISTOPHER HUGHES**  
DMD, PhD  
Chair, Department of Pediatric Dentistry

**ANDREA WEST**  
MBA  
Chief Operating Officer

NOT PICTURED:  
**THOMAS CANGIALOSI**  
DDS  
Chair, Department of Orthodontics

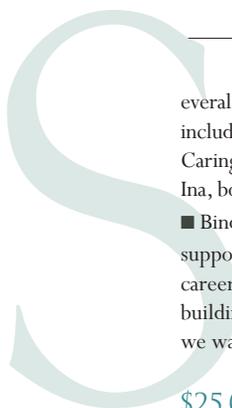
BIG NUMBER

60

HAPPY ANNIVERSARY *This year, RSDM celebrated the 60th anniversary of New Jersey's first dental school and its evolution over the decades.*

# Thank You To Our Generous Supporters Donations and Pledges

January 1, 2015 to May 23, 2016.



Several donors who helped make the Dental Specialty Center possible attended the April, 2016 grand opening, including alumnae Dr. Linda Stone and her daughter, Dr. Vanna Stone, who works with her mother at Gentle Caring Dentistry in Livingston and graduated from RSDM in 2014. Faculty member Howard Drew and his wife, Ina, both donors, and the family of Dr. Robert Binder, also a faculty member, were there.

■ Binder's daughter, Rebecca Binder, and her husband, Chuck Cohen, managing director of Benco Dental, have supported the project on behalf of the Binders and the Benco Family Foundation. ■ "My dad has given his career to the dental school, and we wanted to honor him and the program he's invested so much of his life in building," says Rebecca Binder, executive director of the Benco Family Foundation. "From the foundation side, we want to support dental education, and this clinic is an important part of that."

## \$25,000 to \$499,999

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Carol Piermatti  
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Eastern Dentists Insurance Co.  
Cecile A. Feldman, D.M.D.  
and Harry K. Zohn, D.M.D.

### GIFT



*The Binder and Cohen families donated funding for orthodontic operatories and a conference room in the new Dental Specialty Center.*

GlaxoSmithKline  
 Yosh Jefferson, D.M.D. and  
 Millie Jefferson  
 Shawn M. Lafkowitz, D.M.D.  
 Andrew Sullivan, D.D.S. and  
 Eileen Sullivan  
 Massimo V. Verduci, D.M.D. and  
 Janine Verduci  
 Anthony Volpe, D.D.S. and  
 Marlene M. Volpe  
 Lawrence Wang, D.M.D. and  
 Jenny Wang, D.M.D.

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 Adam E. Feret, D.M.D.



*From left, Chuck Cohen, Rebecca Binder, Ruth Binder and Dr. Robert Binder*

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 Ola Mahmood, D.M.D.  
 Jonathan Mangot, D.M.D., PC  
 Robert D. Marciani, D.M.D.  
 George Mardrossian Jr., D.M.D.  
 Michael P. Marfori, D.M.D.  
 John R. Marshall, M.D.  
 Adele B. Mauriello  
 Lisa McClain  
 John P. McGlynn, D.M.D.  
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 Medical Protective Co.  
 Philip P. Memoli, D.M.D.  
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 Michael M. Messana, D.M.D.  
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 Jonathan Miodownik, D.M.D.  
 Richard A. Miranti, D.M.D.  
 Domenic Monaco, D.M.D.  
 Jenny C. Moreno, D.M.D.  
 Steven M. Morgano, D.M.D.  
 Morrone & Kaye Orthodontics, PA  
 Mary Beth Morrone, D.M.D.  
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 David B. Nardini, D.M.D.  
 Cibele Nasri-Heir  
 Brenda Nathan, D.M.D.  
 Haksim Ndoj  
 Evelyn M. Nelson, D.M.D.  
 New Jersey Dental Association  
 NJ-NY Association of  
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 New York Academy of Dentistry

Joseph A. Oleske, D.M.D.  
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 Ollins Orthodontics, PA  
 Sandra Onukwugha, D.M.D.  
 Orasoptic  
 Orthodontic Specialist, PC  
 Orthopli Corporation  
 Maitreya P. Padukone, D.M.D.  
 Thomas J. Paglione, D.M.D.  
 Jeffrey S. Panicucci, D.M.D. &  
 Denise Lombardo Panicucci  
 Joel N. Pascuzzi, D.M.D.  
 Sminu Patel, B.D.S.  
 Tejash R. Patel, D.M.D.  
 Zinal Patel  
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 Perfect Finish Ortho Lab, Inc.  
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 Pierre Fauchard Academy Foundation  
 Francisco Plaza-Villegas, D.D.S., M.S.  
 Bari F. Posner, D.M.D.  
 Progressive Dental Care, PC  
 Proviser Financial, LLC  
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 Sarat Puthenpura  
 Maryam Rafique, D.M.D.  
 Kimia Raimi  
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 Mario E. Ramos, D.M.D.  
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 Alrene E. Robinson-Campbell, D.M.D.



*Dr. Anthony Volpe, Class of '60, long-time RSDM supporter and alumnus*

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 Steven Koretzky, D.M.D.

Nicholas Kyriakakis, D.M.D.  
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 Patricia LaMorte  
 Robert C. Lampert, D.M.D.  
 Robert L. Lapinski, D.M.D.  
 Robert Laski, D.M.D. and  
 Michele Sanzo-Laski, D.M.D.  
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 Carmel M. Lecorps, D.M.D.  
 LED Dental Ltd.  
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*Operatories in the new Dental Specialty Center were funded by Dr. Howard Drew and his wife, Ina.*



*Left, Dr. Linda Stone, Class of '82, and Dr. Vanna Stone, Class of '14, mother and daughter alumnae and supporters*

Raquel Rodriguez, D.M.D.  
 Raiko Rojas  
 Raymond F. Roncin Jr., D.M.D.  
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 Edward A. Rosenbaum, D.M.D.  
 Nancy Messinger Rosivack  
 R. Glenn Rosivack, D.M.D., M.S.  
 Ross Orthodontics  
 Robert Ross  
 Thomas A. Rossi, D.M.D.  
 Inez Rouse-Pearson  
 Carmine C. Russo, D.M.D.  
 Louis J. Russo Jr., D.D.S.  
 Torin W. Rutner, D.M.D., M.D.  
 Kathleen Sauchelli, D.M.D.  
 Harriet S. Schneiderman  
 Richard C. Schonberg, D.M.D.

Stanley E. Schulman, D.M.D.  
 Michele A. Schultz, D.M.D.  
 James A. Sciarretta, D.M.D.  
 Steven R. Scrivo, D.M.D.  
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 Gregory M. Semashko, D.D.S.  
 Senops, LLC  
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 James J. Shanley, D.M.D.  
 Robert A. Shekitka, D.M.D.  
 Shrewsbury Pediatric  
 Dentistry, LLC  
 Irwin Silversmith, D.M.D.  
 Jerome Silverstein, D.D.S.

Robert Silverstein, D.M.D., M.S., PA  
 Robert Ellis Silverstein, D.M.D. and  
 Sharon L. Silverstein  
 Steven R. Singer, D.D.S. and  
 Sharon Singer  
 James F. Skiba, D.D.S.  
 Gary H. Small, D.M.D.  
 Stephen Smiley, D.D.S.  
 Bradley A. Smith, D.M.D.  
 Kevin D. Smith, D.M.D.  
 Dr. Bruce Sofferman, D.D.S.  
 Bohan B. Soifer, D.M.D.  
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 Christine M. Stanley, D.M.D.  
 Matthew S. Steinberg, D.M.D.

Edward J. Stepka Jr., D.M.D.  
 Van S. Stevens, D.M.D.  
 Orsure W. Stokes, D.M.D.,  
 U.S. Navy (retired)  
 Streamline Dental  
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 Summit Orthodontics  
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 Cynthia Denise Sutton, D.M.D.  
 Corinne D. Swass-Fogarty  
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 Gilbert Tapia  
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 Allan Zanca  
 Julia Zaslavsky, D.M.D.  
 Zimmer Biomet CMF and Thoracic  
 Ira J. Zohn, D.D.S.

**GIFT**



*Funding for the dispensary was a gift from Drs. Linda and Vanna Stone.*

# • R S D M • TIMELINE 2015

## JANUARY:

Thanks to the Dentures for Seniors program, 20 patients at our dental centers in Northfield, Somerdale, and Galloway, NJ received free dentures. The program helps patients age 64 and older who have lost all their teeth.

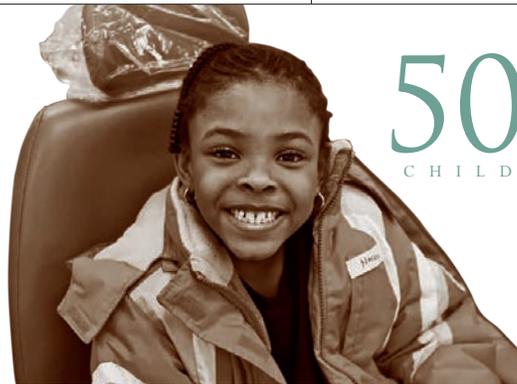
**20**  
PATIENTS

## FEBRUARY:

RSDM's celebrates annual Give Kids a Smile Day with free screenings and fluoride treatments for hundreds of Essex County schoolchildren and others. The nationwide event is held to raise awareness of the importance of oral health care among children, particularly those who are disadvantaged.

## MARCH:

Dean Feldman was installed as Chair-elect of the American Dental Education Association (ADEA), Board of Directors, a role that has allowed her to help shape the future of dentistry.



**500**  
CHILDREN

## APRIL

RSDM partnered with Oral Health America to provide free dental sealants to more than 500 children from Newark and nearby towns as part of Oral Health America's Smiles Across America campaign.

## MAY:

The Class of 2015 made the transition from students to doctors at our convocation ceremony, where 107 graduated with DMD degrees. Grads included a champion Irish step dancer, a mother of five, and students from all over the world.

**107**  
GRADUATES

## JUNE:

For more than a decade, RSDM faculty and students have been helping Special Olympics athletes learn how to take care of their teeth and gums. They were on hand again at the 2015 Special Olympics Summer



Games, held on the campus of The College of New Jersey, in Ewing, NJ.

## JULY:

Researcher Daniel Kadouri was awarded a cooperative agreement for up to \$7.2 million from the U.S. military. Kadouri is the principal investigator on a project that examines the therapeutic potential of predatory bacteria that kill germs resistant to antibiotics.



fluoridated water, at the right level, prevents tooth decay and its consequences," she wrote.

## SEPTEMBER:

The Class of 2019 put on their white coats. The White Coat ceremony, held annually for first-year students, provides a symbolic welcome to the medical profession. The coat represents professionalism, compassion and trust.

## OCTOBER:

For Halloween, Dr. Harry Zohn donned a silvery-white Tooth Fairy costume, complete with a magic molar wand, and danced to Gary Glitter's "Rock and Roll (Part I)." The stunt was part of a student fundraiser.



## NOVEMBER:

RSDM holds Decision for Dentistry, an annual program that helps teens learn more about the world of dental medicine and gives them real-life advice on the best ways to prepare for dental school during high school and college.

## DECEMBER:

Dean Feldman showed her appreciation for over 60 long-time RSDM employees at a service recognition luncheon. Dr. Peter Kudyba, Clinical Professor in Restorative Dentistry, logged the most years. He taught at RSDM for over 50 years and graduated from the school's first class in 1960.



## AUGUST:

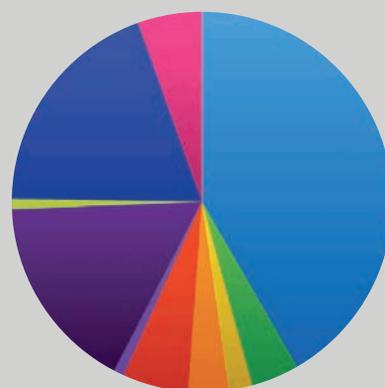
In an op-ed published in *The Star-Ledger*, RSDM Dean Cecile A. Feldman advocated for fluoridated water throughout NJ, refuting anti-fluoride activists. "Sound scientific research has repeatedly shown that



# Financial Report 2015-2016

## FY 2015 Revenues

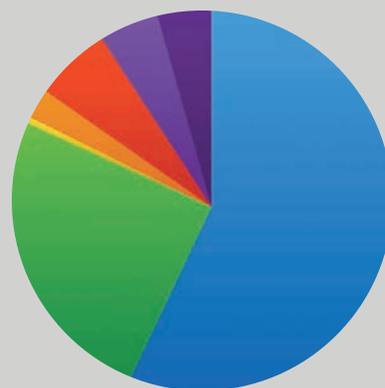
Revenues	2014 Actual IN MILLIONS OF DOLLARS	Percent
1. Tuition and Fees	\$24,269	41.7%
2. Faculty Practice Plan Services	\$2,383	4.1%
3. Housestaff Recoveries	\$1,157	2.0%
4. Affiliate Revenues	\$1,989	3.4%
5. Recoveries of Dir. Grant Exp.	\$3,272	5.6%
6. Indirect Cost Recoveries	\$516	0.9%
7. Patient Service Revenues	\$9,741	16.7%
8. Donations and Endowment Inc.	\$528	0.9%
9. State Appropriations - Direct	\$11,230	19.3%
10. Other	\$3,176	5.5%
<b>Total Revenues</b>	<b>\$58,261</b>	<b>100.0%</b>



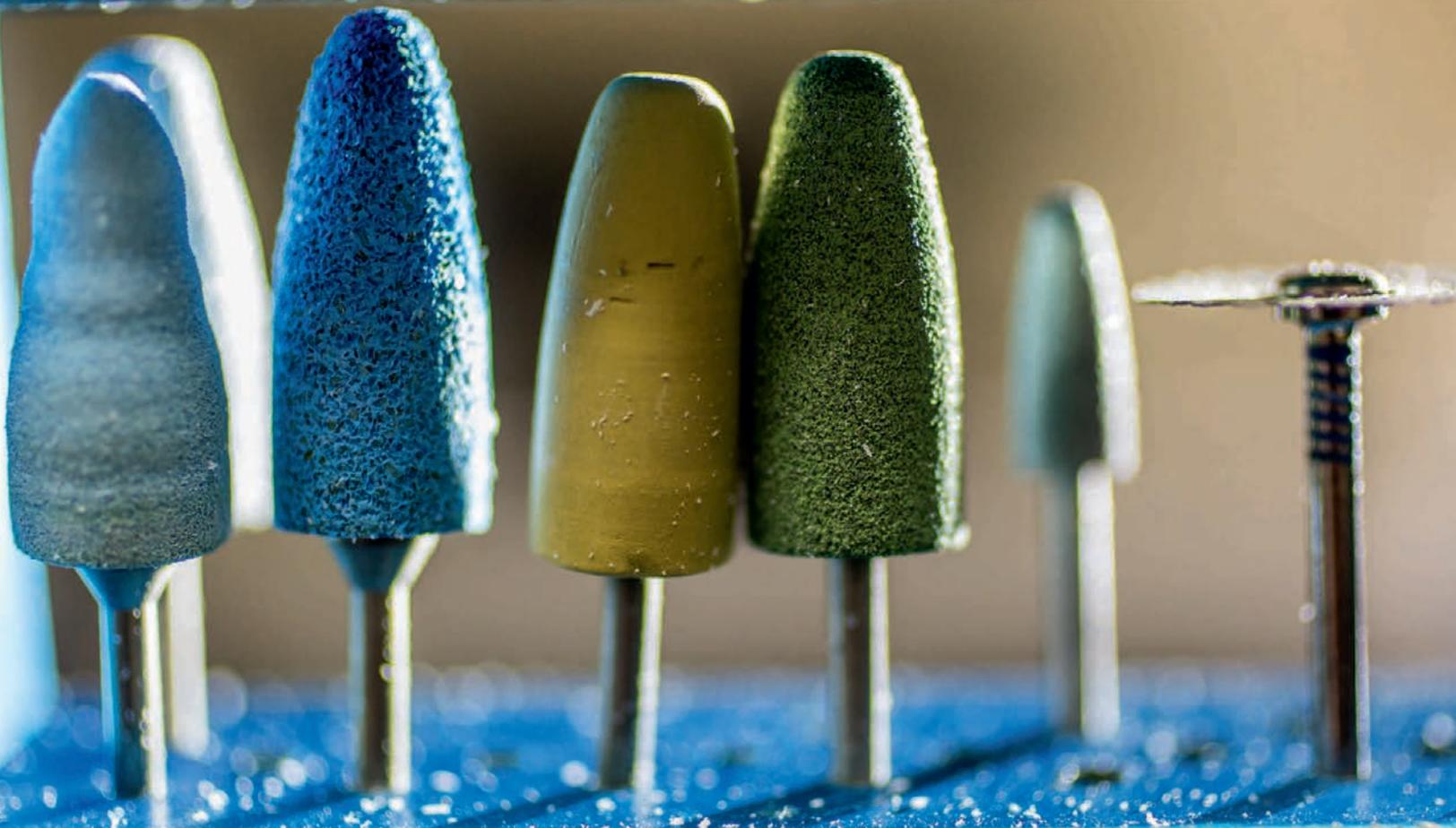
- Tuition and Fees
- Faculty Practice Plan Services
- Housestaff Recoveries
- Affiliate Revenues
- Recoveries of Dir. Grant Exp.
- Indirect Cost Recoveries
- Patient Service Revenues
- Donations and Endowment Inc.
- State Appropriations - Direct
- Other

## FY 2015 Expenses

Expenses	2014 Actual IN MILLIONS OF DOLLARS	Percent
1. Salaries and Wages	\$30,756	57.1%
2. Non-Salary	\$13,359	24.8%
3. Housestaff Salaries/Other	\$1,293	2.4%
4. Direct Grant Expenses	\$3,261	6.1%
5. Life Cycle Management	\$2,575	4.8%
6. Debt Service	\$250	0.5%
7. Central Administrative Costs	\$2,383	4.4%
<b>Total Expenses</b>	<b>\$53,877</b>	<b>100.0%</b>



- Salaries and Wages
- Non-Salary
- Housestaff Salaries
- Direct Grant Expenses
- Life Cycle Management
- Debt Service
- Central Administration Costs



ART & SCIENCE ANNUAL REPORT 2015-2016



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