Research That Inspires and Heals:
Pitt emerges as a national leader in translational research
Research is one of the three legs of the academic stool of the University. The others, of course, are service in the form of patient care at our school, and teaching. Research actually serves as the basis for the other two legs as well. Acquisition of new knowledge to enhance the human condition is the fundamental underlying principle that drives health care research. The School of Dental Medicine is extremely fortunate to have such a strong research base. The Commission on Dental Accreditation (CODA) recently site visited the school and noted our Center for Craniofacial and Dental Genetics, and Center for Craniofacial Regeneration, as exemplars among dental schools for the research done here. These two Pitt Centers of Excellence are perfect examples of direct clinical applicability to patients. The Center for Craniofacial Regeneration is composed of scientists who are developing materials and methods to enhance the tissue of the dental and craniofacial skeletons. Our scientists in the Center for Craniofacial and Dental Genetics are actively working to identify various genetic factors involved in facial form and function, and in particular, those associated with facial clefting. These two key areas represent significant aspects of patient care. We in dental medicine are pivotal in the application of the principles that are derived from this research. Being centrally located in the University of Pittsburgh campus, we have extensive opportunities to collaborate with partners in research, including engineering, medicine and computer science. Our school continues to be recognized in the top 10 as funded by the National Institute of Dental and Craniofacial Research (NIDCR). Moreover, we have significant funding from entities other than the NIDCR. A perfect example of translating our research is the recent acquisition of a U24 grant by Dr. Charles Sfeir in the Center for Craniofacial Regeneration to facilitate the translation of bench research through the FDA approval process and on to clinicians, such as yourselves, for direct patient care. This collaborative grant with the University of Michigan and Harvard University is one of only two awarded nationally.

These extensive activities also permit our students, residents and other faculty members to be actively involved in the research endeavor. I hope you will enjoy and appreciate the articles which follow in this month’s Pitt Dental Medicine magazine.

Sincerely,

[Signature]

Distinguished Service Professor and Dean
University of Pittsburgh
School of Dental Medicine
The Center for Craniofacial Regeneration (CCR) is a University of Pittsburgh designated Center of Excellence directed by Charles Sfeir, DDS, PhD, who also is the Associate Dean of Research, and chair of the Department of Periodontics and Preventive Medicine at the School of Dental Medicine. Both a clinician and researcher, Dr. Sfeir seeks new treatments for patients by undertaking some of the region’s most cutting edge research. Research studies in the CCR range from the molecular and cellular to the whole-organism level. Research in the CCR focuses on the development of new therapies, biomaterials, and diagnostic tools for the treatment of craniofacial diseases and disorders in the following areas:

- the development of bio-inspired materials for mineralized tissue engineering as well as understanding extracellular matrix proteins involved in mineralized tissue biology;
- the development of surgical fixation devices using resorbable metals;
- the development of novel periodontal therapies using modulation strategies to be utilized in dental offices;
- the development of tissue engineering strategies for pulp tissue regeneration, improving endodontic treatments; and
- translational research that involves pre-clinical models.

Much of the research undertaken in the Center is of an intraprofessional nature and involves other departments at the school. For instance, researchers in the CCR work side-by-side with clinical faculty members from the Department of Oral and Maxillofacial Surgery to seek surgical treatments for regenerating bone and other tissues, with the Department of Endodontics on pulp regeneration, and with the Department of Periodontics to develop treatments for patients with periodontal disease. The CCR also reaches beyond the field of dentistry and works interprofessionally with many schools, departments, and areas of study at the University, such as the Schools of Pharmacy and Engineering. Many clinical and research faculty members at the school also are members of the University of Pittsburgh’s McGowan Institute for Regenerative Medicine, one of the premiere research centers in the nation bringing together varied disciplines from throughout the University.

Researchers at the school moved into the newly opened Salk Research Pavilion in September, 2015, to continue their research efforts in better equipped space.
Understanding Biology and Biomineralization Is Foundational for Research at the CCR

A thorough understanding of the mechanisms of craniofacial bone development to better understand biomineralization is a necessary fundamental. “When we better understand the biology of how bone and teeth form, we can develop new therapies that manage biomineralization by working with the natural processes,” said Elia Beniash, PhD, associate professor in the Department of Oral Biology. Beniash’s studies of the biology of bone and other tissues impacts and influences many of the ongoing investigations at the school.

Additionally, improved diagnostic and treatment methods for patients with orofacial clefting and craniosynostosis are being identified through a better understanding of the molecular etiology of these conditions. Heather Szabo-Rogers, PhD, assistant professor in the Department of Oral Biology at the School of Dental Medicine, is working closely with Dr. Sfeir to test how dysmorphologies in the cranial base can contribute to the development of orofacial clefting and craniosynostosis.

### Engineering Cellular Microenvironment Regenerative Therapies for Endodontic Treatments

The development of new techniques for pulp regeneration for endodontic therapy has been a priority for clinicians and researchers at the School of Dental Medicine. Department of Endodontics Chair, Herbert Ray Jr., DMD, joined by researchers in the CCR, have been testing applications of a new regenerative therapy that shows promise in improving root canal therapies. Current conventional root canal therapies involve removing the dental pulp and replacing it with gutta percha, a rubber-like material used to fill the canal that is left when diseased dental pulp is removed from the tooth. Dr. Ray recognized the biological potential of a new hydrogel scaffold material developed by Dr. Juan Taboas, assistant professor in the Department of Oral Biology at the School of Dental Medicine. Dr. Ray says, “If we can build on and support the pulp’s innate ability to survive, we can begin to realize the potential to regenerate this tissue.” The hydrogel scaffold was developed specifically for the regeneration of non-boney tissue, but changes in the permeability of the hydrogel influence the application of the gel and it can be tailored to various applications such as dental pulp.

Building a Network to Move Tissue Regeneration Therapies into Clinics, Quickly

The majority of products we use in dental clinics require FDA approval. The journey of moving these products from the research bench into clinical therapy can be lengthy and arduous. The National Institute of Health (NIH) funds much of the basic science research that will become therapies for our patients. In order to accelerate the transition of the research from the research bench to a therapy, the University of Pittsburgh School of Dental Medicine Department of Periodontics received an $11.7 million grant from the National Institute of Dental and Craniofacial Research (NIDCR) to establish a resource center dedicated to advancing therapies for regenerating damaged dental, oral, and craniofacial tissues.

The Michigan-Pittsburgh-Wyss Resource Center: Supporting Regenerative Medicine in Dental, Oral, and Craniofacial Technologies has been established at the University of Pittsburgh together with the University of Michigan and Harvard University as a part of the NIDCR’s Dental, Oral, and Craniofacial Tissue Regeneration Consortium (DOCTRC). The goal of the consortium is to guide new therapies from the research stages through preclinical studies and into human clinical trials.

Researchers from the three universities joined forces during an initial year-long organizational phase. A second, three-year phase, which will consist of project evaluations based on their clinical and commercial viability, is included in the grant. Approved projects will be matched with specific clinical, scientific, industrial, and regulatory expertise necessary to efficiently translate the research into clinical trials with the goal of therapies moving into clinical use.

“There is tremendous value in craniofacial regenerative medicine research, and our goal is to create therapies and technologies that help patients,” said Charles Sfeir, D.D.S., Ph.D., Principal Investigator, Associate Dean for Research, Chair of the Department of Periodontics and Preventive Dentistry as well as the director of Pitt’s School of Dental Medicine Center for Craniofacial Regeneration. “This newly established consortium is dedicated to making the most promising research in this field a clinical reality, and we are proud to be part of this effort at the University of Pittsburgh.”

Long-standing collaborative efforts between the School of Dental Medicine’s Center for Craniofacial Regeneration and the McGowan Institute for Regenerative Medicine provide outstanding expertise in regenerating dental and oral cranial tissues. It also positions the University of Pittsburgh and the City of Pittsburgh as a leader in tissue regeneration with a proven record of translating tissue engineering therapies.

“This opportunity leverages our substantial base of researchers and support personnel in the regenerative medicine space and provides a focus on the unique challenges faced in the craniofacial area,” said William Wagner, Ph.D., director of Pitt’s McGowan Institute for Regenerative Medicine. “I am confident that the investment from the NIH will result in meaningful progress of new therapies toward patients with needs for craniofacial tissue therapy.”

Dr. Sfeir and Dr. Wagner are the principal investigators at the resource center in Pittsburgh.
Leveraging the Immune System to Treat Periodontal Disease

Periodontal disease affects 47% of adults age 30 or older (64.7 million people) in the United States. Our current periodontal therapies focus on antimicrobial strategies through prophylaxis, scaling and root planning, and local or systemic antimicrobial prescription. These traditional approaches do not address the real cause of the disease which is immune-response related. Designing a therapy that will change our treatment approach to the disease requires a multidisciplinary team. This was the basis of the collaboration between Drs. Charles Sfeir, Chair, Department of Periodontics and Preventive Dentistry, and Steven Little, Chair of the Department of Chemical and Petroleum Engineering.

Dr. Steven Little is the William Kepler Whiteford Engineering Professor in the Departments of Chemical and Petroleum Engineering, Bioengineering, Immunology, and Ophthalmology. Dr. Little joined the University of Pittsburgh McGowan Institute in 2005 after earning his PhD in 2004 from Massachusetts Institute of Technology. He and Dr. Charles Sfeir first met during a recruitment visit in 2005. Also part of the McGowan Institute, Dr. Sfeir had similar interests in tissue engineering with Dr. Little and was instrumental in bringing him to Pitt. Their research interests complement each other very well. Dr. Sfeir is a periodontist able to understand how the treatment can be applied to and benefit patients, while Dr. Little provides the engineering necessary to help realize many treatments. Many of their current projects were begun during weekly research meetings over the past eleven years. Together, they started to gain preliminary data and secured financial support from the Commonwealth of Pa., the Wallace H. Coulter Foundation, and the NIH. Now, they are working together on the translational aspect of research through the NIDCR’s Dental, Oral, and Craniofacial Tissue Regeneration Consortium (DOCTRC), a newly funded consortium comprising the University of Pittsburgh, the University of Michigan, and Harvard University.

Periodontal disease, which includes red, swollen and painful gums and bone destruction, is currently controlled through daily brushing and flossing, and regular professional deep cleaning with scaling and root planning to physically remove tartar. Sometimes, antibiotics are needed to decrease the level of oral bacteria. “Currently, we try to control the build-up of bacteria so it doesn’t trigger severe inflammation, which could potentially damage the bone and tissue that hold the teeth in place,” Dr. Sfeir said. “But that strategy doesn’t address the real cause of the problem, which is an overreaction of the immune system that causes a needlessly aggressive response to the presence of oral bacteria. There is a real need to design new approaches to treat periodontal disease.”

Working with Dr. Little, they focused on how to reestablish the healthy balance between the immune system and bacteria to manage inflammation. “There is a lot of evidence now that shows these diseased tissues are deficient in a subset of immune cells called regulatory T-cells, which tells attacking immune cells to stand down, stopping the inflammatory response,” Dr. Little said. “We wanted to see what would happen if we brought these regulatory T-cells back to the gums.”

Recruitment of the regulatory T-cell population that naturally resolves inflammation has been previously considered to potentially help with wound healing without drugs. It’s the body’s own way to promote healing with the normal effector T-cells by creating a balance between the reg. T-cells and the effector T-cells.

A chemokine, or signaling protein, called CCL2, attracts regulatory T-cells. When enclosed in a microsphere system that slowly releases the protein, and then placed between gums and teeth affected with periodontal disease, the team found that while bacterial load did not change, the patients’ periodontal disease decreased significantly, and the team continued to follow the patient’s disease. “It’s the body’s own way to promote healing with the normal effector T-cells by creating a balance between the reg. T-cells and the effector T-cells,” Dr. Sfeir said. “That strategy doesn’t address the real cause of the problem, which is an overreaction of the immune system that causes a needlessly aggressive response to the presence of oral bacteria. There is a real need to design new approaches to treat periodontal disease.”

Military personnel are substantially burdened with traumatic bone injury to the extremities, but no ideal therapy is available to regenerate large bone volumes in compromised wounds. These wounds are sub-optimal for regeneration because the vascular damage and immune response provoke oxygen deficiency and inflammation which impair bone growth and drive formation of fibrous tissue.

A Department of Defense (DOD) grant for $21M (1.7M direct) over 3 years to accelerate bone healing has been awarded to University of Pittsburgh’s Craniofacial Regeneration (CCR) / McGowan Institute for Regenerative Medicine and the U.S. Army Institute of Surgical Research (ISR). The project’s team of McGowan Institute affiliated faculty members includes: Juan Taboas, PhD. Assistant Professor with the Department of Oral Biology in the School of Dental Medicine and the Department of Biomedical Engineering in the Swanson School of Engineering, PI Alejandro Almarza, PhD. Associate Professor in Oral Biology in the School of Dental Medicine at the University of Pittsburgh with a secondary appointment in the Department of Bioengineering, Col Yadong Wang, PhD. William Kepler Whiteford Professor in Bioengineering with adjunct positions in Chemical Engineering, Mechanical Engineering and Materials Science, and Surgery at the University of Pittsburgh, COl Michael Davis, MD, FACS. Lieutenant Colonel in the U.S. Air Force and serves as the Deputy Commander and the Chief of Reconstrucive Surgery and Regenerative Medicine of the U.S. Army Institute of Surgical Research, San Antonio Military Medical Center, Col (ISR investigator).

The team’s technology to accelerate bone healing is an off-the-shelf biologic device that can be loaded with minimally manipulated autologous mesenchymal stem cells (MSCs) at the point-of-care. It consists of the following components:

- drugs to control the immune response and to control tissue formation by MSCs
- nanoparticles to deliver the drugs over prolonged periods
- porous scaffold to provide mechanical support in large bone defects

These components are assembled in two forms depending on the nature of the bone injury: an injectable hydrogel and an implantable hydrogel infused scaffold. The team expects that an injectable device (components 1-3) will be used by first responders to stabilize bone fragments in comminuted fractures, prevent fibrous tissue ingrowth, and rapidly initiate regeneration. They expect that an implantable device (all components) will be used in the operating theater to promote bone formation and minimize non-union when conventional grafts and bone fillers are contraindicated. They will evaluate bone regeneration over time in two bone injury models in swine, and will test the injectable device in a simulated comminuted fractures of the fibula while the scaffold will be placed at bone defects.

Approximately 20% of injured combat personnel suffer extreme bone fracture and loss, of which 80% are open compromised wounds with significant tissue loss post-debridement. The team’s device will minimize the severe morbidity and the treatment cost for wounded military personnel, and will improve their quality of life and return to service. Ultimately, this work will translate to several clinical therapies in the form of pharmacological interventions and therapeutic devices to promote skeletal healing. These will decrease clinical involvement and impact individual’s lives by speeding skeletal healing, diminishing non-union and tissue fibrosis incidence, and reducing multi-surgery procedures. This work will have a similar strong impact for non-military applications as well.
A New Wave of Compatible Metals
Why we should care about Resorbable Metals?

Periodontists are in need of grafting material to utilize in procedures such as ridge augmentation; periodontal regeneration or socket preservation; and membranes and resorbable fixation devices for guided tissue regeneration. Novel technologies based on resorbable metallic materials are being developed at the University of Pittsburgh School of Dental Medicine.

Approximately nine years ago, Drs. Charles Sfeir, from the School of Dental Medicine Department of Periodontics, and William Wagner from the University of Pittsburgh McGowan Institute for Regenerative Medicine, with North Carolina Agricultural and Technical State University (NCAT) and University of Cincinnati, started a collaboration to revolutionize metallic biomaterials that was funded by a National Science Foundation (NSF) Engineering Research Center (ERC) grant. The ERC aims to bring resorbable metallic biomaterials to the forefront of clinical therapies in craniofacial, orthopedic and cardiovascular areas.

Their successful collaboration is yielding dental technologies that are advancing down the translational path and will ultimately become FDA approved therapies for patients.

“These novel resorbable metals still provide mechanical strength but degrade, eliminating the need for a second surgery,” said Dr. Sfeir.

Dr. Wagner explains that the use of certain metals in fixation devices is “based upon the recognition that those metals traditionally being used in medicine and dentistry were from a very limited set. All of them were selected for their resistance to corrosion, relative biocompatibility and their mechanical properties.”

Unfortunately, the currently used non resorbable metals cause complications including interference with pediatric skeletal growth, pain, long-term infection, and necrosis of surrounding bone.

To avoid these complications, devices may be removed through a second invasive surgery, increasing patient burden and risk, as well as overall treatment costs.

To circumvent these problems, degradable magnesium (Mg) alloys provide an ideal balance of degradation and strength. In addition, Mg alloys have optimal mechanical properties for bone fixation, including a low density, high fracture toughness, and compressive strength similar to cortical bone.

“In regenerative medicine, the concept of leaving nothing behind is a central tenet,” Dr. Wagner said. “In other areas of regenerative medicine, people use materials that degrade over time and go away. With metals, there are no FDA approved metals that go away.”

“Interestingly enough, we stumbled on the biological effect of Mg in bone. While resorbable Mg metals permit sufficient mechanical strength, as they degrade they release magnesium in the surrounding area that trigger bone to regenerate and achieve faster healing,” said Dr. Sfeir.

Through the work of the ERC and other similar efforts, these technologies will become therapies in the next five years. ERC researchers have advanced technologies to bring non-toxic, biodegradable implant materials, such as magnesium, that dissolve and increase tissue growth as the body heals around them.

“The research has grown exponentially in the past five to 10 years. I like to say we’re at the forefront of that with this center,” Dr. Wagner said. “It will open up a whole new paradigm.”

These newly engineered devices will be further advanced down the translational path and fit well within the mission of the newly-formed Michigan-Pittsburgh-Wyss Resource Center: Supporting Regenerative Medicine in Dental, Oral and Craniofacial Technologies, made possible through a grant from the NIDCR.

Center for Craniofacial and Dental Genetics

The Center for Craniofacial and Dental Genetics (CCDG) is an innovative University of Pittsburgh Center of Excellence, located in the School of Dental Medicine and directed by Professor Mary L. Marazita. From its inception in 2001, the CCDG has grown to a team of almost 50 faculty, staff, and students, and currently is housed in the Bridgeside Point, near the Hot Metal Bridge, not far from the University of Pittsburgh Oakland campus.

Current research priorities of the CCDG include: genomic and phenotypic studies of orofacial clefting in populations around the world; studies of the etiologic factors contributing to dental caries and other oral health issues affecting Northern Appalachian populations; and identification of the genes that impact variation in specific facial features. These priorities are spearheaded by CCDG faculty including Dr. Marazita, Dr. Seth Weinberg, and Dr. Elizabeth Leslie, plus an extensive network of collaborators within the University of Pittsburgh and many other universities, world-wide.

There are several recent developments across the CCDG research program of which Director Marazita is most proud. Five-year continuations of each of the Center’s two major NIH grants, one focused on orofacial cleft birth defects and one focused on oral health in Appalachia—totaling about $24 million in funding—are major accomplishments given the current NIH research funding environment. Other recent funding includes two grants that were received from the Gabrielli Miller Kids First Pediatric Research Initiative (GMKF) from the Office of the NIH Director (https://commonfund.nih.gov/kidsfirst/overview)

“Through these GMKF grants, we will receive whole genome sequence data for Caucasian and Latino orofacial cleft families,” Dr. Marazita said, adding that this represents the first large-scale orofacial cleft studies to implement the whole genome sequencing approach. “We are proud to have received two of the 18 grants awarded to date for this GMKF initiative.”

In March of this year, two of the CCDG’s papers were honored with major awards for dental-related research: one with a Gies Award for best Clinical Research Paper in the Journal of Dental Research and another with a Giddon Award for Distinguished Research in Behavioral, Epidemiological and Health Services Research.

Dr. Marazita received her PhD in Genetics with an emphasis on Biostatistics, from the University of North Carolina, Chapel Hill, followed by a postdoctoral fellowship in Craniofacial Biology at the University of Southern California. After faculty positions at UCLA and the Medical College of Virginia, Dr. Marazita joined the faculty of the University of Pittsburgh in 1993 as Director of the Cleft Palate-Craniofacial Clinical Services team.
Dr. Marazita has been involved in the studies of a wide variety of human traits and disorders over the years, including birth defects, oral diseases, premature birth, behavioral and psychiatric conditions, diabetes, and many others. She has two current major research projects: genomic and phenotypic studies of orofacial cleft birth defects, and studies of genetic, microbial and behavioral factors impacting oral health in children.

Dr. Marazita’s involvement in orofacial cleft research traces its roots back to her time as a postdoctoral student in the 1980s, and partly results from her training in medical genetics, during which she logged many hours in medical genetics specialty clinics, including those involving birth defects.

“Families who had a child with a facial birth defect were often very upset, even though the long-term prognosis was good in many cases. The families always wondered what caused the birth defect, and at the time there were no good answers. Thus, I have been dedicated to research that eventually will elucidate the causes of orofacial clefts and other facial birth defects,” Dr. Marazita said.

The most common facial birth defects are orofacial clefts, such as cleft lip and cleft palate. Orofacial clefts create feeding difficulties early in life and require numerous surgical and dental interventions, as well as speech therapy and other ongoing services. Moreover, these individuals face increased risk for mental health problems, certain types of cancer and overall, a higher mortality rate. Ever since her postdoctoral years in the 1980s, Dr. Marazita has continuously been funded for her orofacial cleft research by the National Institute for Dental and Craniofacial Research (NIDCR) of the NIH. Her studies have led her to collaborations around the globe with research sites on every continent except Antarctica. Current collaborators include investigators in the Philippines, Colombia, Nigeria, Puerto Rico and various United States sites.

In addition to the orofacial cleft research, Dr. Marazita is engaged in research aimed at determining sources of oral health disparities in high risk, Northern Appalachian populations in West Virginia and western Pennsylvania. This project examines genetic, environmental, behavioral and microbial factors and patterns of transmission within families in order to understand the causes of these oral health disparities in Appalachia, and eventually design effective interventions to reduce these disparities. This research began in 2000, in collaboration with Dr. Robert Weyant of the School of Dental Medicine Center for Oral Health Research in Appalachia (COHRA) and colleagues at West Virginia University and the University of Michigan. Since those collaborations began in 2000, multiple research grants have been received by the CCDG from the NIH. The currently-funded COHRA projects focus on following the development of the dentition and onset of oral diseases in a cohort of mother-child pairs recruited during pregnancy and followed until the child reaches at least age 6.

Many of the big questions about the genetics that cause orofacial clefting can now be answered using the increasingly available genetic data and large datasets that Dr. Marazita has compiled.

Only now, with the help of these genetic data tools, may the complexity of this disorder be unraveled. It has been known for a long time that there are multiple genes and environmental risk factors that contribute to the disorder. But now that researchers have such a large resource, and data to leverage, they can find out just how complex it is. In fact, in spite of its complexities, many researchers are finding genes and combinations of genes that make sense, biologically, that enable separating clefts into different groups to further discover the patterns of risk factors.

Generally, for clefting, the most important take away is that orofacial clefts are very heterogeneous. They can affect the lip, the palate, or both. Historically, they get combined into two groups: lip without cleft palate and lip with cleft palate. Numerous studies have been undertaken at the CCDG looking at those two groups both separately and combined. What the Center is finding is that the historical separation of those two groups makes some sense, but it is also not that simple since they are identifying shared risk factors.

Members of the CCDG also are considering the question of...
how two people with the same disorder (OFC) can look very different. Through the CCDG data collected, they are getting that answer. For them, it helps to answer some questions they have been asking: What are the genetic risk factors? How do they make such a complex phenotype? The team continues finding puzzle pieces (genes), and is moving toward finding out how genes control specific types of clefting by leveraging all these data.

The CCDG is significant in that it is the first center to actually find a gene that causes nonsyndromic cleft palate. The variant is itself functional, unlike most variants that have been identified that are not directly cause an OFC, orofacial clefting. As a graduate student, CCDG researcher and their parents (trios). This important data for about 500 trios will help the team look at different classes of genetic variants they haven’t been able to examine previously. CCDG colleagues hope the information will one day help to predict how severe clefting may be and use the genetic information to determine the best management practices for patients and their families, possibly through identifying risk for poor wound healing, surgical outcomes or development of certain types of cancer.

Studies on the genetic basis of normal-range variation in human facial features were spurred initially by phenotypic studies of orofacial clefting. As a graduate student, CCDG researcher and and imaging to the student of craniofacial variation, and the application of morphometrics to examine previously. CCDG variants they haven't been able at different classes of genetic associations, many genetic associations, which we are in the process of publishing.

When he first received funding support from the NIH to pursue this line of research in 2009 no one had ever attempted a whole-genome association study of normal-range facial traits in humans.

“Even today, there are still only a handful of studies that have accomplished this goal,” he said. “It is exciting to be in the early stages of discovery, and we are well-positioned to be an integral part of future endeavors in this area of research.”

The work of Dr. Weinberg and his colleagues has received attention from both fellow researchers and ordinary people, the PLoS Genetics publication was covered by national and international news outlets and recently was featured in an “Ask Me Anything” question and answer chat on the website, Reddit.

“It has been very satisfying to see this project come to fruition. It took a long time, many partnerships, and a lot of resources to accomplish.”

Dr. Seth Weinberg

The School of Dental Medicine is working tirelessly to improve educational opportunities and develop new therapies for dental clinicians. Throughout our academically rigorous curriculum, we are providing students with critical thinking research opportunities to meet the changing needs of dental medicine. But cutting edge research depends upon a consistent funding stream, notably through grants from the National Institutes of Health (NIH) and National Institute of Dental and Craniofacial Research (NIDCR). Over the years, however, funding from these sources has fluctuated widely, often connected to governmental or economic concerns. To ensure the continued success of the school, research opportunities for our students, and the development of new therapies, your assistance is critical.

To support ongoing efforts to improve clinical treatments and invest in the next generation of dental professionals, please contact Mr. Paul Casey at 412-383-7544 or at Pbc8@pitt.edu.
Improving Patient Treatments Through Genetics

Alexandre Vieira, DDS, MS, PhD, looks forward to a day when you will be able to connect with data about your own genetic health risk factors as easily as you search the internet—perhaps even with the help of your dentist.

“Someday, I would like to implement a system where people can find out about themselves, like on Ancestry.com,” said Dr. Vieira. Identifying genetic health risk information to be utilized in a preventive manner could offer a cost effective way to use health care resources. “You can identify a person with particular risks through a specific biomarker,” Dr. Vieira said. “The challenge is how to find those biomarkers.”

Research that he is performing now may be bringing his vision one step closer to reality. Dr. Vieira is a professor in the Department of Oral Biology and has secondary appointments at the school’s Department of Pediatric Dentistry and the University of Pittsburgh Department of Human Genetics, serves as Director of Clinical Research and Director of Student Research for the School of Dental Medicine, and also is the creator and director of the Dental Registry and DNA Repository (DRDR) at the school. He has been maintaining and growing a unique resource—an ever-expanding collection of DNA information collected from dental patients who agree to participate—for the past decade.

The project, which is housed at the University of Pittsburgh, is the only project of its kind in the world. DRDR data are linked to a comprehensive set of dental phenotypes and DNA samples offering a unique resource of clinical and biological information.

“I invite all patients that comes to Pitt Dental Medicine to be a part of this registry, get samples of their DNA and look at what their records can tell them about themselves,” Dr. Vieira said. DNA, which has become quite visible in recent years, is at the heart of the project. “I feel like I’ve got a lot of support for this endeavor,” Dr. Vieira says. “It allows the school to be competitive in writing grants and other projects since it’s the only collection of DNA in the world that is focused on oral health and dentistry.”

Developing Targeted Treatments

Dozens of studies already have taken advantage of the thousands of samples stored in the DRDR.

“Our data can be utilized by researchers studying diseases to help them better understand disease and design more effective treatments,” Dr. Vieira said. “A biomarker can allow you to identify a person as having particular risks and enable researchers, together with clinicians, to develop highly-targeted individual treatments.”

His research interests mainly focus on susceptibility to craniofacial, oral and dental diseases and the impact of oral health on overall health. “The disease we could do the most with is dental caries—we’ve shown there are links between genetic variation and susceptibility to dental caries,” Dr. Vieira said. It’s a well known fact that diet can cause the development of caries lesions but there is still the component of a susceptible host. Creating solutions and treatments relies first upon understanding the disease. “We always believed there was some genetic underpinning to this and we are the first ones to show some of those significant genetic factors in a convincing way.”

Current Research Beyond the DRDR

Dr. Vieira’s laboratory has developed projects focusing genetic variation and the impact on dental caries; studies about why people with clefting and other orofacial anomalies are more susceptible to cancer; and how the environment impacts an individual’s vulnerability to disease. He currently is partnering on projects with the UPMC Center for Medicine & the Microbiome where he serves as the Oral Microbiome Focus Group Leader; and with researchers in Tromso, Norway investigating the Scandinavian city’s high rate of cardiovascular disease. This year, Dr. Vieira also participated in the Ninth Annual International Enamel 9 Symposium in North Yorkshire, United Kingdom, where he served as chair of the conference’s Travel Award Committee and sat on its international advisory board and scientific committee. His involvement with this event resulted in securing a grant from the National Institute of Dental and Craniofacial Research (NIDCR). At the symposium he also presented the paper, In Vitro Acid-Mediated Initial Dental Enamel Loss Is Associated with Genetic Variants Previously Linked to Caries Experience. “I always like forging these kinds of mutually beneficial relationships with other research institutions,” Dr. Vieira said. “I think it’s exciting.”

Trained as a dentist, Dr. Vieira said that it was a class on genetics in dental school that spurred his research interests. “I was fascinated by the Human Genome Project,” he said. “So I asked for the opportunity to study genes.” In time, he left his native Brazil for the University of Iowa – with a suite of 500 genetic samples in tow—where he completed six years of post-doctoral training. Since starting his research career, Dr. Vieira has been honored three times: individually and with fellow researchers. The International Association for Dental Research (IADR) awarded him his highest honor, the distinguished scientist award for his contributions that changed the field of Cariology, as well as the IADR’s William J. Gies Award.

Though his research focuses on the molecular level, it is an expansive and varied perspective that informs Dr. Vieira’s work. “We have to look at the phenotype in a much broader way. It’s not the disease alone. It’s everything that is creating it,” he said. “Wouldn’t it be great if a dentist had the ability based on what they see in your mouth to make predictions about your health in general?”

Dr. Alexandre Vieira, Director of the Dental Registry and DNA Repository.
Translational Medicine: Driving the Future of Clinical Innovation

Dr. B.J. Costello

Translational medicine is generally defined as the idea of developing processes for making research advancements, such as new diagnostics, treatments, procedures or changes in behavior, available for use by clinicians in the community. At its core, translational medicine is not concerned with particular medical topics or specific diseases. Instead, it focuses on the process of actualizing research achievements ultimately to benefit patients; the most productive ideas from the great minds of our basic scientists working at the bench are used in inventive ways that can be translated quickly to patient care. Recently, the University of Pittsburgh and some other universities have been adopting a translational medicine approach to research by helping clinicians and researchers connect to increase and improve communication between these groups. In fact, the School of Dental Medicine, under the guidance of Dr. Thomas Braun, Dean, has placed considerable emphasis on creating an environment that fosters identifying opportunities for clinicians and researchers to collaborate and develop innovative solutions that benefit patients. Many joint clinical/research grants are being realized at the school in support of these collaborative efforts. Likewise, the National Institutes of Health (NIH) have supported the School of Dental Medicine and has created the National Center for Advancing Translational Sciences (NCATS) with the aim of transforming the translational process so that new treatments and cures for diseases can be delivered faster to patients.

Dr. Bernard J. Costello, professor, Associate Dean for Faculty Affairs, and Senior Associate Dean at the School of Dental Medicine became involved in research expressly to help patients. He joined the school in the Department of Oral and Maxillofacial Surgery in 2001. Shortly after, he began collaborative research efforts with Dr. Siefert and a team representing siloed disciplines with the specific aim of developing products that are ultimately useful to patients. Dr. Costello notes, “What is unique about our group is the regular, in-person interaction that we have between superior clinicians, basic scientists, bioengineers and material scientists. Just the act of putting people in the same room to incubate ideas breaks down the typical silos and other barriers. The interdisciplinary team works together in a new facility that was specifically designed to facilitate that open communication.”

“Many research enterprises talk about doing this, but we achieve this, and the results, including the development of a bone putty, resorbable metals, cellular constructs and other technologies, have created excitement and tangible support from many funding agencies and industry. The challenge is that the excitement is infectious, and people want to work with this team.” Dr. Costello saw the potential for this enterprise to be a new catalyst for translational research. “When we first started meeting over ten years ago, we had a handful of technologies in the early stages of the pipeline that were just beginning to show promise. Not only were the initial studies encouraging, with strong support from the Department of Defense and others, but we started to get interest from other faculty residents and students to start projects in bone, TMJ, stem cells and other areas.” Dr. Costello adds that just the act of putting basic scientists, pharmacologists, bioengineers and clinicians in the same room provided a new type of synergy and excitement that broke down commonplace academic silos. An interplay of ideas started developing, many of which have led to substantial research advances, intellectual property development and new companies. “It has been a way for us to facilitate scholarly activity within the school and have it be exciting for clinicians.” Interdisciplinary and translational approaches to research and advancement efforts are not unique to the School of Dental Medicine, but the school is one of the national leaders in this area. Braun supports this successful approach and has put key people in place to lead and advance clinical research efforts. While many studies are just beginning others, such as the resorbable magnesium fixation devices, are very close to being available for use by clinicians. Both the Center for Craniofacial Regeneration and the Center for Craniofacial and Dental Genetics and the University of Pittsburgh are involved beyond performing research. These institutions are actively promoting research developments by helping to move them into the marketplace.

Preparing the Dentists of Tomorrow to Address Public Health Concerns

With routine care and dental checkups, many Western Pennsylvaniaers from Erie to Greene County, in both urban and rural settings, providing a wide range of service learning opportunities and experiences. These clinical programs aim to improve our students’ understanding of the extent of the access to care problem and importantly how it can become part of the solution to that problem. In addition to their community rotations, within the dental school, students provide free dental screenings and treatments to children of school age who are not able to afford care, and supporting the dental needs of the special needs community, a group that has historically experienced difficulty securing adequate dental care. The school is now expanding its community involvement through participation in the University of Pittsburgh’s new Community Engagement Centers Initiative. This program will result in the development of several community sites and involve multiple University departments where they will create new and innovative partnerships and opportunities between the University and area neighborhoods. This program is designed to foster multidisciplinary teaching and build stronger, more reciprocal partnerships between Pitt and local communities. As the new centers will include dental clinics, this will provide an opportunity for dental students to participate in exciting new learning environments.

Student participation in community-based service learning experiences offers many benefits. Students see first-hand how community focused healthcare is being delivered. Many of these community based programs put dental students into interprofessional settings where they interact with other health care professional students in a shared learning environment. As a result, students report that these experiences broaden their understanding of the importance and value of oral health as part of overall health and wellness, and often report that the experience inspired them to consider careers in community-based care delivery. Students also enhance their clinical capabilities in various aspects of dentistry as well as their cultural competence, often returning to school with increased self-confidence. Finally, the dental school services delivered by our students directly benefit the communities in need.

Faculty advisor Dr. Sarah Essex Grafton (DMD ’00, GPR ’10), relied on her experiences in community services as a student to shape her involvement as an assistant professor at the School of Dental Medicine. Now a passionate member of community Pennsylvania, as a student, Dr. Grafton promotes these experiences each day in the clinics of the school.

“One of the greatest aspects of incorporating a service learning focus into the dental school’s educational environment is that it places students in positions to work with patients in diverse community settings while in school. Most of these students then have enough familiarity with underserved communities that when they graduate they are more likely to continue to provide these services in their own professional practices.”

“Providing students with opportunities to use their newly acquired clinical skills to help those who are unable to pay for the most satisfying aspects of my career as a dental educator.” Dr. Grafton said.

For students who wish to focus their careers on public health, the school offers an opportunity to enroll in the highly-competitive Masters of Public Health (MPH) dual degree program, which can be completed concurrently with the Doctor of Dental Medicine (DMD) degree. The program prepares graduates for careers in public health leadership roles that can address complex care delivery and oral health disparities at both the local and national or global levels. Similarly, students can pursue the knowledge and skills needed in Dental Public Health, which was developed within the past year, to study social/behavioral and community-service programs.

“I think Pitt is considered a destination school because of the excellence of our education, the opportunity to take advantage of private dental care and oral health disparities. As a result, we are stepping up and acknowledging that we have the opportunity to take advantage of private dental care. We want our students to appreciate that and that might be part of the solution – whether it’s working, volunteering, or providing care as part of overall health and wellness, and often report that the experience inspired them to consider careers in community-based care delivery. Students also enhance their clinical capabilities in various aspects of dentistry as well as their cultural competence, often returning to school with increased self-confidence. Finally, the dental school services delivered by our students directly benefit the communities in need.”

Sustaining these important service learning and educational programs requires support beyond what is typically covered by student tuition. As a result, we are dedicated to seeking support from various sources with support from alumni being one of the most important. If you would like to support ongoing community outreach educational programs for current and future students at the School of Dental Medicine, please contact Paul Casey at 412-383-7544.
Hello and welcome to the Summer 2017 issue of the Pitt Dental Medicine Magazine. I’d like to start by introducing myself as the new President of the Pitt Dental Alumni Association (DAA). My name is Lisa Babb, and I am a 2011 graduate of Pitt Dental Medicine. I am currently in private practice with my own orthodontic office in Mount Lebanon in the south hills area of Pittsburgh. I’m honored to have been elected into this position and look forward to working with the rest of the alumni board, and all alumni, to help facilitate effective communication between the current students and Pitt Dental Medicine Alumni.

I hope you enjoy this issue of our Dental Medicine Magazine. Throughout the issue you will see highlighted the many efforts of our amazing faculty and student research programs. I’m sure most of our Pitt Dental Alumni strive to practice evidence-based dentistry in their office on a daily basis. It is the contributions of the faculty and staff in the School of Dental Medicine that allow us to keep up with cutting edge research and trends in the dental profession. They perform research that improves the quality of care that we continue to offer our patients; only the highest standard of care is expected from a Pitt Dental Medicine grad. I’d like to finish by saying congratulations to the most recent dental graduates and specialists who finished their training and graduated May 20. Welcome to the “real world” and please know that the Pitt Dental Alumni Association is here for you every step of the way throughout your career.

If you have any suggestions about events that the DAA can coordinate or sponsor, please do not hesitate to contact me: drlisa@babborhoododontics.com or Nancy Poe at 412-648-8910.

Thanks and Hall to Pitt!

Dr. Lisa Babb
President, Dental Alumni Association

In April, I was so thankful and humbled to be the recipient of the Distinguished Alumna Dental Hygiene award. It was wonderful to see so many friends at the Dean’s Scholarship Ball last spring, particularly members of the Dental Hygiene September Class of 1980. Visiting with former classmates and faculty made for a very enjoyable evening.

Thank you to all of those who supported Dental Hygiene Program students in August by participating in the dental hygiene program’s informative poster session. The students truly appreciate your interest in their research projects each year.

MESSAGE FROM THE DENTAL ALUMNI ASSOCIATION
VICE PRESIDENT, DENTAL HYGIENE

Looking ahead, we hope to see many of you this fall at the festivities planned for the Pitt Dental Medicine Alumni Weekend. There will be a continuing education course for dental hygienists on Friday, September 15, and a tailgate for all dental alumni on Saturday, September 16, at Heinz Field before the football game. Details about the first annual event can be found on pages 22-24, as well as on the University of Pittsburgh School of Dental Medicine’s website.

Mark your calendar and plan to attend!

Ms. Susan Ban (DH ’80)
Vice President, Dental Hygiene, Dental Alumni Association

Alumni Honored as New ABPD Diplomates

Eleven University of Pittsburgh School of Dental Medicine alumni are new diplomates of the American Board of Pediatric Dentistry (ABPD). They received their pins at a ceremony held during the 70th annual session of the American Academy of Pediatric Dentistry in May, 2017. The new diplomates are: Dr. Michael Austin (DMD ’09); Dr. James Busch (PEDO ’15); Dr. Kanisha Campbell (DMD ’11); Dr. Danielle Cooper (DMD ’15, PEDO ’15); Dr. Azita Elyaderani (DMD ’11); Dr. Oscar Garcia (DMD ’02); Dr. Alexandra Jensen (DMD ’13); Dr. Aditi Jindal (DMD ’10); Dr. Kendra Martin (PEDO ’13); Dr. Andrea Zandarelli Have (DMD ’99, PEDO ’14); and Dr. Courtney Walters Uselton (DMD ’13).

Please let us know what you have been up to by sharing your news and updates. Email Nancy Poe at poe@pitt.edu, or call 412-648-8910.
Friday, September 15
UPDATES IN CLINICAL DENTISTRY
CONTINUING EDUCATION
UNIVERSITY CLUB - Ballroom B
8:30am - 3:30pm
Information on Page 23
Continuing Education courses
sponsored in part by T.F. Bowser
Memorial Lecture Series

Friday, September 15
WELCOME BACK CLASS OF 1967
50 Year Reunion Luncheon
UNIVERSITY CLUB - Gold Room
12:00pm

Friday, September 15
GOLDEN ALUMNI REUNION LUNCHEON
(All Classes Prior to 1967)
UNIVERSITY CLUB - Ivy Room
12:00pm

Friday, September 15
UNIVERSITY OF PITTSBURGH AND PITT DENTAL TOUR
1:30pm - 4:00pm
The 50 Year Class and Golden Alumni are invited to a bus tour through campus with a stop at the School of Dental Medicine. Visit with current students and discuss how the dental school experience has changed over the last 50 years. The bus will return to the University Club at 3:30pm.

Friday, September 15
PITT DENTAL COCKTAIL RECEPTION
UNIVERSITY CLUB - Ballroom A
Please join us for a reception for alumni and friends following the CE courses and tours.

Saturday, September 16
PITT DENTAL MEDICINE TAILGATE
10:00am
Pregame lunch and soft drinks will be provided; please feel free to bring your own adult beverages. Location details will be available on our website at dental.pitt.edu closer to game day.

PITT VS. OKLAHOMA STATE FOOTBALL GAME
12:00pm - Heinz Field
For tickets, call 1.800.643.PITT (7488) or email tickets@athletics.pitt.edu

HOTEL INFORMATION
Rooms have been reserved at the Hilton Garden Inn Pittsburgh University Place.
3454 Forbes Avenue
Pittsburgh, Pennsylvania 15213
412.688.1982
The special room rates will be available until August 18th or until the group block is sold-out, whichever comes first.
Please visit https://goo.gl/nU10xv to see more details and make your reservations.

Friday, October 13
CONTINUING EDUCATION
8:30am - 3:30pm
Prosthodontic Techniques for the General Dentist for the Restoration of the Destroyed Dentition - From Simple to Complex
Information on Page 24

Friday, October 13 - Saturday, October 14
UNIVERSITY EVENTS
A University Welcome Back reception will be held at the Cathedral of Learning along with other social, cultural, and educational events throughout the weekend.
For a schedule of all University events, visit pitt.edu/alumni.
Please note, advanced registration is required for most University events.
All questions regarding the University Homecoming Weekend schedule or registration should be directed to the Pitt Alumni Association at 412.624.8229.

PITT VS. NORTH CAROLINA STATE HOMECOMING GAME
Time TBD - Heinz Field
For tickets, call 1.800.643.PITT or email tickets@athletics.pitt.edu

CLASS CELEBRATIONS
Get involved! If you affiliate with a class that graduated in a year ending in 2 or 7 and would like to help organize your reunion, contact the Alumni Office for assistance at 412.648.8910 or poen@pitt.edu.
RESTORATION OF THE DESTROYED DENTITION - FROM SIMPLE TO COMPLEX: PROSTHODONTIC TECHNIQUES FOR THE GERIATRIC PATIENT
Friday, October 13, 2017
8:30 a.m. - 3:30 p.m.
University of Pittsburgh School of Dental Medicine
Assistant Professor, Department of Prosthodontics, University of Pittsburgh School of Dental Medicine
Staff Prosthodontist and Assistant Program Director, Veterans Affairs Medical Center, Pittsburgh, Pa.

Course Description
This course will focus on an evaluation and diagnosis of complex restorative and prosthodontic cases, including those both limited in scope as well as extensive. Gathering of appropriate diagnostic data beyond the routine will be emphasized including evaluation of restorative and implantation occlusal and occlusion plane. A high emphasis will be placed on the inter-relationships of the maxillary anterior teeth. What appears as the role of implants will obviously be discussed, this course will be taught in an interdisciplinary approach rather than on the natural dentition but on prosthodontic principles applicable and vital to all modes of restoration. The role of all ceramic improvements as well as the use of CAM technology, will also be included. In addition to the core principles, specific techniques including preparation design, crown and provisionalization will be described.

Upon completion of this course, participants will:
• develop the diagnostic skills to properly evaluate vertical dimension of occlusion and the criteria for altering it;
• understand the importance of establishment of proper incisal edge establishment for both esthetic and functional purposes;
• obtain a working knowledge of basic differences in all-ceramic systems and their indications for use;
• gain insight into the proper use of advanced computer generated technologies and their role in the treatment of medically complex patients. The use and management of provisional restorations play in treatment planning and designing restorations especially as it relates to implant restorations;
• understand the vital significance of provisional restorations play in restorative and prosthodontic dentistry;
• learn some basic techniques and armamentarium for fabrication of provisional restorations; and
• gain insight into proper and creative utilization of implants in restorative dentistry.

• obtain a summary of proper implant techniques to achieve excellent results in the esthetic zone.

Tuition:
Dentists: $295/
Auxiliaries: $145
Credit Hours: 6

Twenty-Fourth Annual T. F. Bowser Memorial Lecture
FOREVER YOUNG: TAKING CARE OF NUMBERS
Saturday, April 7, 2018
8:30 a.m. - 1:00 p.m.
Scaife Hall (Pitt Medical School)
Auditoriums 5 & 6
3550 Terrace St
Pittsburgh, PA 15213

Barbara J. Steinberg, DDS
Clinical Professor of Surgery at Drexel University College of Medicine
Adjunct Associate Professor of Oral Medicine at the University of Pennsylvania School of Dental Medicine

Course Description
We all want to age gracefully, feel good, look good, and live a long healthy life. This high energy, entertaining course, based on the most current scientific information will examine the physical, mental, and emotional issues for living a long healthy life. As healthcare providers, we strive to achieve perfect balance in life, realizing fulfillment and success in our professional lives while maintaining good physical and mental health.

Upon completion of this course, attendees will:
• appreciate how mental and emotional well-being is linked to staying young and healthy;
• discover the commonalities of successful aging and disease prevention;
• implement tips to improve taking care of yourself;
• understand how factors contributing to well being relate to physical health;
• discuss risk factors, prevention and treatment of heart disease;
• appreciate the roles nutrition, exercise, stress reduction, and laughter play in overall health;
• discuss the impact of sex, stress reduction and sleep in maintaining a healthy life, and
• understand how optimism and strong social networks create the healthiest life styles.

Dr. Steinberg received her DDS from the University of Maryland School of Dentistry and completed a residency at the Medical College of Pennsylvania. She is Clinical Professor of Surgery at Drexel University College of Medicine, as well as Adjunct Associate Professor of Oral Medicine at the University of Pennsylvania School of Dental Medicine. She is a Diplomat of the American Board of Oral Medicine. Dr. Steinberg specializes in the treatment of dental and medically compromised patients. She is an international leader in the area of dental treatment of the medically compromised patient and has authored numerous articles and contributed to major textbooks on these subjects. Dr. Steinberg is a frequent speaker on the ADA on Women’s Oral Health Issues and has made numerous television appearances, including Good Morning America. She represented the ADA at a congressional briefing on Women’s Oral Health Issues and presently serves on the Health, Nutrition and Fitness Board of Women’s Day Magazine.

Tuition:
Dentists: $75/
Auxiliaries: $50
Credit Hours: 4

For additional information a complete list of CE courses, or to register for any of these courses, please visit dental.pitt.edu/ce
Please visit our website for information about viewing a live video of the ceremony: dental.pitt.edu/white-coat-ceremony

For more information, please contact Ms. Nancy Poe at 412-648-8910 or poen@pitt.edu.
Dr. R. Donald Hoffman
(DMD ’72, MEd ’82, PhD ’88)
was honored during the evening with a special recognition as Emeritus Faculty member and with gratitude for his many years of dedication to the University and the School of Dental Medicine. Dr. Hoffman served as a member of the School of Dental Medicine faculty since 1872.

Ellen F. Piehl
“During my archaeological research, I enjoyed studying the clinical aspects of dentistry in textbooks far more than the archaeological reports: The ways in which diet, microorganisms within the oral cavity and hygiene practices interact to produce a variety of dental conditions proved particularly interesting and confirmed my desire to pursue a dental career.”

Ms. Ellen Piehl is originally from Pittsburgh, Pa. In 2014, she earned a bachelor of arts degree in archaeology and anthropology from the University of Oxford. She also attended Columbia University in New York from 2016-16, and Westchester University of Pa. in 2016-17. Her studies have focused on course and lab work in general and more specifically in organic chemistry, physics and biology.

While at Oxford, she was given an opportunity to work with Dr. Rick Schulting researching Oxford collections to analyze dentition and pathology patterns in large sets of archaeological samples of human dental remains. She also studied general human and dental remains (enamel hypoplasia and caries) at archaeological excavations in England, Spain, Portugal and Romania. Studying archaeological samples of ancient people who did not practice dental hygiene magnified the importance of dental health. This new research interest during her field work, significantly charged the direction of her career: rather than working toward an academic career in anthropology, she preferred the excitement of dental medicine and dental health.

To learn more about her new interest in dentistry, she attended the Midwestern University ASDA course where she learned basic dental skills. Ms. Piehl has been very active in presidents clubs while in college, and is an avid rower, having held the position of Women’s Captain of Boats for the Keble College Boat Club at Oxford. She will begin her studies in the School of Dental Medicine in August, 2017.

Kendra D. Rowey
“I’m honored to be in the Pitt Dental Medicine Class of 2021. I look forward to the challenging curriculum and rewarding experiences ahead as I pursue my passion of helping others through dentistry.”

Ms. Kendra Rowey is a native of St. Louis, Missouri and just completed her bachelor of science degree in biological sciences at the University of Pittsburgh in April. She maintained a 3.86 GPA, while earning certificates in Latin American Studies, Conceptual Foundations of Medicine, and was on the Dean’s List.

Ms. Rowey built her leadership skills through participation in groups and organizations such as the University of Pittsburgh University Honors College and the Partners in Progress (PIP) programs where she acted as a Spanish language interpreter, volunteered at the Birmingham Free Medical Clinic where she acted as a Spanish language interpreter, volunteered at the Light of Life Ministry by serving meals, and was a tutor in reading, writing, and mathematics for Latino families at the Latino Family Center.

Dr. Patrick Donnelly, PhD
“I grew up under the care of Pitt-trained dentists and I am excited now to be studying where my own dentists were educated.”

Dr. Patrick E. Donnelly, who hails from Lawrenceville, New Jersey, is joining the School of Dental Medicine as a rather accomplished student. After earning his bachelor of science degree in chemistry from the University of Scranton, Dr. Donnelly went on to realize both a master of arts and Ph.D in chemistry from Princeton University. He has performed a good deal of research while at Princeton and the University of Scranton, as well as during a post-doctoral fellowship at the Hospital for Special Surgery in New York. He has been an author on many publications resulting from these research endeavors.

Dr. Donnelly has been recognized with several awards including the Ruth L. Kirchstein National Research Award, the Stanley A. Lefkowitz Fellowship, and an Excellence in Chemistry Award. He also has been an Assistant Instructor for The City College of New York.

Volunteerism is important to Dr. Donnelly and he has been active as an Alpine Patroller for the National Ski Patrol, and spent a year as an Alpine Patroller for the National Ski Patrol, and spent a year as an Alpine Patroller for the National Ski Patrol, and spent a year as an Alpine Patroller for the National Ski Patrol. Giving back to the community is of great importance to Ms. Rowey and she has been an active volunteer at the Birmingham Free Medical Clinic where she acted as a Spanish language interpreter, volunteered at the Light of Life Ministry by serving meals, and was a tutor in reading, writing, and mathematics for Latino families at the Latino Family Center.

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Ms. Susan Ban, RDH, BS, is the recipient of the University of Pittsburgh School of Dental Medicine Distinguished Alumnus-Dental Hygiene Award 2017. Ms. Ban earned her Certificate in Dental Assisting in 1979 immediately followed by earning her Certificate in Oral Hygiene in 1980 at the School of Dental Medicine. In 2007, she completed her course of study, concentrating in research, to earn her bachelor of science degree in Dental Hygiene at Pitt Dental Medicine.

Since completing her BS, Ms. Ban has been a part-time clinical instructor position in the Dental Hygiene Program at the School of Dental Medicine. She brings to her position several decades of clinical experience, having worked as a dental hygienist for several dental offices in the Pittsburgh area.

"... no other alumni has contributed to the promotion and advancement of the Dental Hygiene Program to this level." - Angelina Riccelli

The 2017 Distinguished Alumnus-Advanced Education Award recipient, Dr. Andrew J. Kwansyz, is a devoted Pitt alumus, having completed all of his higher education at the University of Pittsburgh. He earned his DMD from the University of Pittsburgh School of Dental Medicine in 1983, his master of science in dentistry in orthodontics from Pitt School of Dental Medicine, MSD, and his master of public health in infectious disease & microbiology from the Graduate School of Public Health. He has practiced as an orthodontist for more than 30 years in Erie, Pa.

Recently, he was honored as the recipient of the 2017 Distinguished Service Award from the Pennsylvania Dental Association (PDA), and in 2008-09 he was the president of the PDA.

An active member of the American Dental Association (ADA), Dr. Kwansy currently serves as the ADA Third District Trustee on the ADA Board of Trustees. His involvement with the ADA includes: sitting on the Information Technology, Business Innovation and Diversity and Inclusion Committees of the ADA Board of Trustees; Trustee liaison to the Councils on Scientific Affairs, Membership, Dental Practice, Council on Dental Education and Licensure, the American Dental Assistants COL Bagby also acts as the Director of the Oral and Maxillofacial Surgery Program at Brooke Army Medical Center at Joint Base San Antonio/Fort Sam Houston. This is the Department of Defense’s only Level 1 Trauma Center.

Among his achievements, he commanded of tactical dental unit 561-51 Dental Company in Vilseck, Germany (which, coincidentally, is the same post held by alumna, COL Priscilla Hamilton (DMD ’91)), where he was responsible for promotions, command selection and career development for every officer in the Dental Corps. Widening his achievement beyond dentistry, he was selected to become Deputy Commander for Health Readiness at Madigan Army Medical Center, replacing a physician who held the position.

COL Bagby is an Operation Iraqi Freedom combat veteran and a highly decorated officer who has received the Bronze Star Medal, Meritorious Service Medal with three Oak Leaf Clusters; Army Commendation Medal with two Oak Leaf Clusters; Army Achievement Medal with one Oak Leaf Cluster; Iraq Campaign medal with two bronze service stars; Overseas Service Ribbon with two awards; and an Army Parachutists Badge. He is active in many professional organizations, also, and is a member of the prestigious Order of Military Medical Merit. Received the Surgeon General’s A’ Proficiency Designator, is a fellow in the American Association of Oral and Maxillofacial Surgeons; and is board certified by the American Board of Oral and Maxillofacial Surgery.

“He is a remarkable thinker, with an unparalleled grasp of strategic issues in healthcare and land warfare.” - COL Priscilla Hamilton

COL Bagby has a long-standing interest in cars and just added a Porsche Panamera to his fleet. His favorite car is a 1989 Toyota Corolla with more than 280K miles that he drives each day. He is also an antique weapon enthusiast, and his collection includes a .50 caliber sniper rifle. COL Bagby was proud to have his wife Mélanie (Pitt Law ’91) and his daughter Sydney in attendance as he was recognized for his lifetime of stellar performance and commitment to service.
Tau Sigma, the military dental club that began at Pitt Dental Medicine in 2013, once again collected donations to support homeless veterans. Last fall, the club collected $1,500 in donations to support Shepard’s Heart Shelter in downtown Pittsburgh. Shepard’s Heart helps homeless veterans. The club, which has grown to include more than 38 chapters at dental schools across the United States, will begin their 2017 homeless veterans collection efforts in October.

Pitt ASDA 11th Annual Charity Golf Outing, 2017

The University of Pittsburgh School of Dental Medicine chapter of the American Student Dental Association (ASDA) hosted the 11th Annual Charity Golf Outing in June, 2017, at Birdsfoot Golf Club in Freeport, Pennsylvania. The scramble format competition featured 16 teams comprising current dental students, alumni, and faculty from the School of Dental Medicine.

The tournament began at 2 p.m. with a song played by a bagpipe player, a fitting commencement for Birdsfoot Golf Club, a Scotland-esque links-style golf course lined with fescue and rolling terrain. The sunny day was complimented by equally remarkable scores. Pitt Dental Medicine student, Mr. Stephen Kupniewski (class of 2020) and his younger brother, Mr. Chris Kupniewski, finished in first place with an impressive score of 15 under par. The event also included skills competitions such as a longest and shortest drives, and a putting contest.

Pitt ASDA raised nearly $400 to benefit the Women’s Shelter of Greater Pittsburgh, a local organization that served more than 6,000 women and children in 2016. Pitt ASDA thanks everyone for their support and participation, and looks forward to next year’s event.

Supporting Homeless Veterans

Donations are used to purchase gift cards which are distributed to all of the veterans in need at Shepard’s Heart Shelter.

Pictured left to right: Members of the class of 2019, Jordan Antetomaso, Davis Mullany, Eric Guzik, and Tom Lacey, were the ASDA Golf Outing runner-up team.

Please plan to join us at the DEAN’S SCHOLARSHIP BALL April 7, 2018 at a new venue, The Heinz History Center, to celebrate and honor Dr. Thomas Braun’s legacy at the University of Pittsburgh School of Dental Medicine.

The School of Dental Medicine gratefully acknowledges the dedication and contributions of the Pallan family and the Tippins Foundation for establishing an endowed scholarship fund in memory of Dr. Frank G. Pallan (DDS ’52, MS Oral Surgery ’58).
Despite its name, there’s nothing prehistoric about Iron Dinosaur Racing. Created by Don Gilmore, an amateur paleontologist, the name was derived from the initial welding on the car frame, which was a bold rib-like pattern. In 2010, Gilmore began investigating land speed racing, and traveled to Maxton, NC, to view several races before deciding to build a car. He began the design in 2010 and physical construction started in February 2011.

As additional skills became necessary to complete the car, more team members joined to lend their talents to Gilmore’s dream. “This was Don Gilmore’s brain child,” says team member Nora Peace. “Don is the paved paver and we have all jumped on board for the adventure!”

The team is a true collaboration — from all walks of life. “My husband’s a dentist and I am a lawyer,” says Peace. “One of our drivers is a software entrepreneur from the United Kingdom — our backgrounds are all over the board.” Despite their differences, the desire to go faster, design, build, improve and operate a land speed racing car has brought this unique Pittsburgh team closer than ever.

Formed in 2012, team members include Don Gilmore, Brian Moran, Chuck Gray, Jim Bertges, Arnie and Nora Peace, Bill Shever, Dan Foreman, Clar Young and Paul Stepek. These members hail from the Pittsburgh area and most are either professionals in the engineering field or car enthusiasts with mechanical expertise. Many have been involved in various types of racing over the years from derby to dirt track to drag racing.

The team’s goal includes designing and constructing a land speed race car capable of capturing records at both the East Coast and Bonneville Salt Flats. Gilmore explains, “The car must be designed for safety, it must meet all of the club rules for racing at a particular venue and it must be designed to break the record. The requirements are inspected and assessed at each event by at least two representatives from the racing venues. A signature on the team’s inspection form from each inspector is required to race.

However, Gilmore points out, “each car, once it meets the requirements for safety and designated race class, tends to be a truly individual creation.” The Iron Dinosaur team started with straight sticks of steel from Glenshaw Steel Supply, bent the frame and built everything required to make the car run, stop and go. Specialized engine cooling, fire safety systems, parachute systems and aerodynamic requirements all had to be considered in the construction process.

The team uses the same car year after year, as it takes thousands of man-hours to construct a car from scratch, but the car is always a work in progress and the team is constantly making improvements and changes. After running the belly tank body and realizing that it was lacking aerodynamic efficiency, a new body was designed to utilize the previously constructed car mechanical components. The data developed from a trip to the A2 wind tunnel facility in Mooresville, NC, was used to design the new aerodynamic body. “The car is now a hand-hammered aluminum-skinned beauty, fabricated by Dr. Peace,” beams Gilmore.

To date, Gilmore has put the vast majority of funds into the Iron Dinosaur and is the owner of the car. The team does, however, have a number of sponsors including Dakota Engineering Associates, Inc.; Hampton Technical Associates; Studio Wild West from Pittsburgh; CINTAR, Inc. from Glenshaw; and Vectric Ltd. From Redditch, England.

The Iron Dinosaur team currently holds five land speed records at the ECTA Ohio Mile track in Wilmingon, OH. It is also the East Coast record holder for C class motor blown fuel lakester cars. The team tested the car on the Bonneville Salt Flats in August of 2013 but the event was rained out the past two years. In that time, the team worked on the aluminum lakester design with exposed tires and wheels, and with no fenders. This design is much more aerodynamic and the team plans to make an attempt to break the existing record of 349.673 mph.

The team is scheduled to race again in April at the Ohio Mile, and also plan to participate in the Loring Timing Association event in Limestone, ME, in July as well as Speed Week at Bonneville in August of this year.

The team also participates in the available hometown events and took part in the World of Wheels competition in Pittsburgh this past January. While the World of Wheels does not involve racing, it’s a competition and opportunity to show chassis design and body design to the general public. The Iron Dinosaur had dozens of young people slide into the driver’s seat, won First Place in its class, and was definitely a fan favorite.

The Iron Dinosaur team is one of only two land speed race teams currently active in the Pittsburgh region and is proud to continue Pittsburgh’s long history with auto racing.

“As I approach the twilight of my career, I cherish the gifts that Pitt Dental medicine gave me – a lifelong career that benefitted me financially and helped me grow as a person. My children are at the school now and I can think of no greater tribute than entrusting the School of Dental Medicine with their education.”

For more information, visit irondinosaurracing.com or search Iron Dinosaur Racing on Facebook.

Ian and Nicole Peace are the children of Dr. Arnie and Mrs. Nora Peace and currently are students at Pitt Dental Medicine. Both Ian (class of 2019) and Nicole (class of 2020) are quick to admit that their decisions to pursue dental medicine were at least in part influenced by their father’s passion for his career. “In high school, I was on a tour of Pitt School of Dental Medicine and saw my father as a professional. I saw how proud he was of his profession and he became a role model to me, as much as he is my father,” said Ian. But even during his undergraduate college years at Case Western University, he wasn’t sure of exactly what career he wanted to pursue. “I was better at science than at writing, so a career in medicine seemed an ideal direction,” he said, referring to choosing between following in his father’s footsteps, or a career in law, like that of his mother. A rising third-year student, Ian still is unsure about exactly where his education in dental medicine will lead him, but for now he feels most attracted to the business side of running a dental practice.

Nicole, on the other hand, has been more decisive about her plans, “I’ve known that I want to be a dentist since I was in the fifth grade,” she said. Like her brother, Nicole attended Case Western University and is doing very well during her first year at Pitt Dental Medicine. “I might pursue a dental specialty after I complete my DDS, but for now I am not sure what I’ll focus on.” She adds. Both students chose to attend their father’s alma mater, Pitt Dental Medicine, in large part because of a desire to “come home” after being out of state for their undergraduate degrees. Also, like their father, both share a passion toward various hobbies and interests. For instance, beyond racing cars, Dr. Arnie Peace has tried his hand at pottery, stained glass, and both studying about and actively digging at historical sites to learn more about paleontology. “He’s always tinkering with something,” said Nicole, referring to her father’s sustainable passion for his interests. No matter what their final career choice is in dental medicine, the School of Dental Medicine is happy and proud to welcome the next generation of the Peace family into our family.
Poor oral health can have a significant impact on a child’s overall health, yet research suggests that dental care is the most common unmet health need in American children. Begun in 2003, GKAS provides uninsured children and adolescents in the area with preventive and restorative care during a 2-day event. Treatments are provided by University of Pittsburgh School of Dental Medicine faculty, resident and student volunteers in the Department of Pediatric Dentistry and the Dental Hygiene program. Services include cleanings, x-rays, extractions and restorations and treatments that require anesthesia. Many families return for ongoing care.” Dr. Studen-Pavlovich, professor and program director for the Advanced Residency Program in Pediatric Dentistry. “Our primary goal in this event is to promote a lifelong commitment to oral health. We encourage children and their parents to return to the clinic to receive ongoing care.” Dr. Studen-Pavlovich has been coordinating GKAS events for about a decade so that area children may receive free dental care through the school’s clinic.

Summer Smiles was started in 2015 through a generous donation by faculty member and alumnus, Dr. Edward Korenman and his wife, Jan. The event provides free exams, cleaning, fluoride applications and radiographs to children who also participate in the annual Give Kids a Smile Days as well as uninsured children and adolescents in the Metro Pittsburgh area.

This year’s GKAS event was made more exciting for the kids—and the students, faculty and staff at Pitt Dental Medicine—when the Pitt Panther joined to support childhood oral health.

The Pitt Alumni Association Awarded scholarships to two Pitt Dental Medicine alumni, Dr. Adrianna Jenson (DMD ’13) and Mr. Seth Laino (Class of 2018). The scholarships support their current training. Dr. Adrianna Jenson received a Graduate Scholarship (A one-time scholarship awarded to an incoming or currently enrolled Pitt graduate student who also received his/her undergraduate degree from Pitt) and Mr. Seth Laino, pictured at left, was awarded the Dr. & Mrs. Alexander Minno Graduate Student Resource Award (A one-time scholarship awarded to an incoming or currently enrolled Pitt graduate student who also received his/her undergraduate degree from Pitt.) Congratulations to both alums for being honored among the best and brightest students at Pitt.

The University of Pittsburgh School of Dental Medicine Give Kids a Smile (GKAS) and Summer Smiles programs

The American Student Dental Association (ASDA) looks forward to making this year’s expo the best yet.

For the most current information, please visit pittsasda.com

Pitt Dental Medicine Pediatric Residents Provide Care at PNC Park

Dr. Sara Ruby (DMD ’04), a second-year pediatric dental resident at the School of Dental Medicine (pictured at left, center), recently participated in Team Smile, an event at PNC Park organized by United Concordia. The annual event provides a day of free dental care to area children. Dr. Joseph Troupe (DMD ’11), organizes this event. Also pictured with Dr. Ruby are Ms. Cindy Meyer from the Center for Patients with Special Needs (CPSN) and Ms. Linda McAnany from the Department of Oral and Maxillofacial Surgery.

Residents Provide Care at PNC Park

The Department of Anesthesiology assisted us with two free general anesthesia cases this year. This saved local families the cost of their anesthesia services, which totaled $2,600” said Dr. Studen-Pavlovich. Pitt Dental Medicine Alumni Receive Scholarships for Graduate Studies

The Pitt Alumni Association Awarded scholarships to two Pitt Dental Medicine alumni, Dr. Adrianna Jenson (DMD ’13) and Mr. Seth Laino (Class of 2018). The scholarships support their current training. Dr. Adrianna Jenson received a Graduate Scholarship (A one-time scholarship awarded to an incoming or currently enrolled Pitt graduate student who also received his/her undergraduate degree from Pitt) and Mr. Seth Laino, pictured at left, was awarded the Dr. & Mrs. Alexander Minno Graduate Student Resource Award (A one-time scholarship awarded to an incoming or currently enrolled Pitt graduate student who also received his/her undergraduate degree from Pitt.) Congratulations to both alums for being honored among the best and brightest students at Pitt.

Pitt Dental Medicine Alumni Receive Scholarships for Graduate Studies

The American Student Dental Association Steel City Dental Expo 2017

September 21, 2017

Wyndham Pittsburgh University Center
100 Lytton Avenue
Pittsburgh, PA 15213

Presentation
8:30-11:30 a.m.

Vendor Fair
1-4 p.m.

Plans for ASDA Steel City Expo 2017 are currently underway.

The 2017 ASDA Steel City Dental Expo features keynote speaker Gordon J. Christiansen, DDS, MSD, PhD, who will discuss prosthodontic innovations. The afternoon is dedicated to a large vendor fair. If you have questions, or represent an organization that is interested in participating in the vendor fair, please contact Mr. Matthew Britt, Pitt ASDA President at MAB483@pitt.edu

ASDA looks forward to making this year’s expo the best yet.

For the most current information, please visit pittsasda.com

Providing Dental Care Across the Globe

In May a small, hardworking team of 12 dental students and faculty travelled to Honduras to provide free dental care to the rural communities in Comayagua and Siguatepeque. The group saw more than 940 patients and performed over 1200 procedures. “It was pretty amazing to see my teammates work tirelessly from the heart to provide dental care to these underserved people,” said Ms. Jaimin Sin, Class of 2018. Pictured at right: top: A Honduran patient joins Dr. Lacey Williams and Kang, Ms. Jaimin Shin, Bottom: Dr. Matthew Cooke, Mr. Ryan Kang and Dr. Lacey Williams in the treatment center.
Lamp 3: Made of collected bits of sea glass, this glass lamp also sports a driftwood base crafted by Dr. Yurosko.

Lamp 2: Showcasing one of Dr. Yurosko’s favorite pastimes, the golfer’s lamp uses traditional flat panels of glass in its construction and a mini golf bag as a lamp base.

Lamp 3: One of the more challenging lamps that Dr. Yurosko created features a bamboo patterned lighted glass base and a green fabric shade.

Lamp 4: Inspired to become a pilot by a story his father was a pilot. He’s admitted to some degree, of wanting to have his own plane just so he could go fishing in the tropics.

Lamp 5: Where Are They Now? John J. Yurosko, DMD

A successful oral and maxillofacial surgeon and academician, Dr. John Yurosko (DMD 70) hasn’t slowed down as he pursues new and long-held passions during retirement.

When Dr. Yurosko retired in 2015, he continued to be just as active as he had been throughout his career and pursue his many interests, along with developing new passions. He’s been able to own and pilot his own plane, scuba dive and fish in the Caribbean, sailed a four-masted boat around Tahiti, expand his interest in growing orchids, and developed an interest in wine and wine making. He was inspired to become a pilot by a story his parents read to him as a child about a boy whose father was a pilot. He’s admitted to some degree, of wanting to have his own plane just so he could go fishing in the tropics.

To enable many of his interests to grow, he purchased 5 acres of land where he built a home that can accommodate the many things he loves to do.

One long-time interest that he has developed beyond a hobby is designing and building stained glass pieces. Determined to know more about this art, he found a Venice-based glass artist to teach him the techniques of crafting glass into art. He has created many amazing pieces in a traditional manner, but the pieces he is most proud of are those that are made using found glass objects. His proximity to the beach gives him access to one of his favorite materials: sea glass. These somewhat rare pieces of discarded glass, that have been softened and buffed by the ocean, are collected and arranged into beautiful lamps.

Dr. Yurosko’s love of creating stained glass pieces recently has been combined with his love of teaching. He now teaches stained glass techniques at the Sarasota Technical College a few nights each week. Always seeking to more deeply comprehend his passions, Dr. Yurosko notes “Until you teach a subject, you don’t really understand it,” he adds that this approach applies to all things, from learning astronomy to fly fishing.

Dr. Yurosko has been a very active and connected dental alumus. His strong relationship with Pitt Dental Medicine lead him to make a considerable donation connected dental alumus. His strong relationship with Pitt Dental Medicine

For additional information, a complete list of all of the School of Dental Medicine CE courses, or to register for this course, please visit dental.pitt.edu/ce.

Saturday, April 7, 2018
9:30 a.m. – 1:00 p.m.
Scaife Hall (PMT Medical School) • Auditoriums 5 & 6 3550 Terrace St • Pittsburgh, PA 15213
Barbara J. Steinberg, DDS
Clinical Professor of Surgery at Drexel University College of Medicine
Adjunct Associate Professor of Oral Medicine at the University of Pennsylvania School of Dental Medicine

Course Description
We all want to age gracefully, feel good, look good, and live a long healthy life. This high energy, entertaining course, based on the most current scientific information, will examine the physical, mental, and emotional issues for living a long healthy life.

As healthcare providers, we strive to achieve perfect balance in life, realizing fulfillment and success in our professional lives while maintaining good physical and mental health. Dr. Steinberg will also present the impact of the 4 S’s (Sex, Sleep, Stress and Social Networks) on disease and aging. The importance of social networks, optimism and laughter and their benefit to successful aging will be discussed.

Tuition:
• Dentists: $75 /Auilaces: $50
Credit Hours: 4

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For more than 40 years the Oral and Maxillofacial Pathology Biopsy Service has conducted consultation and tissue diagnostic services for the dental and medical communities of Western Pennsylvania.

Our board-certified oral and maxillofacial pathologists provide a rapid, accurate diagnosis of your biopsy specimens.

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PittsburghOralPathology@dental.pitt.edu
The School of Dental Medicine welcomed family and friends to the 2017 diploma ceremony at Heinz Hall on May 20, 2017. Dr. Arthur Levine, Senior Vice Chancellor for Health Science and John and Gertrude Petersen Dean of the School of Medicine, spoke to the graduating class as they began their careers. 2017 saw 82 students receive their DMD, 32 receive certificates in advanced dentistry, and 24 students receive certificates in dental hygiene.
On May 19, 2017, the day before the School of Dental Medicine Commencement Ceremony, a Graduation Celebration Luncheon honored the students in the class of 2017 at the University Club in Oakland. During this very busy time of year, students took a moment to come together with relatives and friends, as well as faculty and staff, to recognize and celebrate the completion of their DMD studies. The luncheon was held in conjunction with the Senior Awards Ceremony (please see page 46) where faculty recognize members of the graduating class for their achievements throughout dental school and each dental class honors faculty and staff for their support. New Dental Alumni Association president, Dr. Lisa Babb (DMD ’11), spoke to the new graduates and reminded them about the importance to both them and the school by staying connected to their alma mater throughout their careers. Each student then received a gift from an alumnus to mark their entrance into the Pitt Dental Alumni Association.

The 2017 Senior Luncheon and Awards Ceremony was hosted by the Office of Alumni Affairs and Development and the Office of Student Affairs. Thank you to the Pennsylvania Dental Association (PDA) and the family of Dr. Earl J. Cornelius (DDS ’24) for their generous support of our students and this event.

1. Class of 2017 president, Dr. Samantha Linkowski (DMD ’17), and her mother, Dr. Cheryl Rosato (DMD ’80), enjoy a moment together at the luncheon.
2. Dr. Danielle Cooper (DMD ’13, PEDO ’15), assistant professor, center, helps distribute gifts to the graduates.
3. Dr. Ben Levine (DMD ’17) and his father, Dr. Steven Levine (DMD ’83), assistant professor at the School of Dental Medicine, enjoyed the celebration.
4. Dr. Christopher Resnik (DMD ’17) at the luncheon with his mother.
SENIOR AWARDS FOR THE CLASS OF 2017

Matthew A. Landin
Andrew L. Decker
Thomas E. Backeris

Omicron Kappa Upsilon
Gerald Orner Award

American Association of Anesthesiology Horace Wells Award
Samantha R. Linkowski
NobelBiocare Senior Implant Award

Michael J. Genello
Straumann Senior Implant Award

Student Achievement Award
International Congress of Oral Implant Dentistry Award

Alexander J. Frisbie
American Academy of Prosthodontists
Outstanding Dental Student Award

Christopher R. Resnik
American College of Prosthodontists
Prosthodontic Award

W. Arthur George
American Association of Oral & Maxillofacial Radiology
Certificate in Dental Public Health

Jamie A. Kaufer
American Academy of Oral & Maxillofacial Radiology
Certificate of Merit Award

Samantha R. Linkowski
American Academy of Pediatric Dentistry
Certificate of Merit Award

Katelyn M. Petraglia
American Academy of Oral Medicine
Certificate of Merit

Dr. Mark Ochs
American College of Prosthodontists
Association Recognition Award

2017 Pennsylvania Dental Association Faculty Recognition Award

Ms. Janet Moberg
Class of 2018 Faculty & Staff Awards

Dr. John Schumann
Class of 2019 Faculty & Staff Awards

Dr. Marin Mandradjieff
Class of 2020 Faculty & Staff Awards

Certificate of Merit Award
Pierre Fauchard Academy

Dr. Brittney Dierker
International College of Dentists
Student Humanitarian Award

International Association for Dental Research Investigator Award from the International Association for Dental Research

Dr. William Chung
recently was promoted to professor in the Department of Oral & Maxillofacial Surgery at the School of Dental Medicine. He also was appointed as a consultant for the American Association of Oral and Maxillofacial Surgeons (AAOMS) Committee on Anesthesia, after completing a six-year term as the District II representative. He will be serving as a content expert for the Simulation in Anesthesia Safety Pilot Study.

Dr. Edward Adelisi (DMMD ‘76)
assistant professor, was reelected in April, 2017, as a Director for the American Dental Society of Anesthesiology (ADSA) for a two-year term. ADSA comprises about 5000 dentists in the areas of oral and maxillofacial surgery, dental anesthesia, pediatric dentistry, and general dentistry, who use moderate sedation, deep sedation, and general anesthesia in their practices.

Dr. Paul Moore (DMDD ’73; MDS ’73; PhD ’77), professor and expert on the opioid crisis currently facing the country, presented “Prescribing Opioid Analogues in Pediatric Dentistry” at the National Rx Opioid Drug Abuse & Heroin Summit in Atlanta in April, 2017. In May, he presented “REMS Guidelines for Prescribing Opioids for Acute Pain” at the FDA Workshop in Silver Spring, Maryland.

In April, Dr. Deborah Polk, assistant professor in the Department of Dental Public Health, was presented vice-chair of the Board of Directors of the Pennsylvania Coalition for Oral Health.

Dr. Andrey Varinale Nave (DMDD ’99; Pedo ’84), assistant professor in the Department of Pediatric Dentistry, was a general dentist with the United States Navy and in private practice before completing her residency in pediatric dentistry at the School of Dental Medicine. She recently was awarded the American Academy of Pediatric Dentistry’s (AAPD) Master Clinician Scholarship. She was one of 7 awardees for the 2017-18 cycle. The scholarship includes tuition and fees to the Institute for Teaching and Learning in Atlanta and complimentary registration to the AAPD Comprehensive Review of Pediatric Dentistry

Dr. Alexia Visoe, professor, was a presenter at the Australasian Dental Association’s 37th Australian Dental Congress in Melbourne in May. He gave two plenary presentations: “The reason why a patient reports brushing every day and still has cavities and Malocclusion and how the bone structures actually do not explain the whole story.”

Dr. Andrea Zarandelli Nave (DMDD ’96; Pedo ’81), assistant professor in the Department of Pediatric Dentistry, was a general dentist with the United States Navy and in private practice before completing her residency in pediatric dentistry at the School of Dental Medicine. She recently was awarded the American Academy of Pediatric Dentistry’s (AAPD) Master Clinician Scholarship. She was one of 7 awardees for the 2017-18 cycle. The scholarship includes tuition and fees to the Institute for Teaching and Learning in Atlanta and complimentary registration to the AAPD Comprehensive Review of Pediatric Dentistry.
We proudly present three faculty members who are making their mark in dental education. The following three faculty members’ articles were included in the top 10 articles of the year by the American Dental Education Association (ADEA) and have been published in the Journal of Dental Education (JDE) as the editor’s picks of 2016. All articles are now available for free on the Journal of Dental Education website.

**Dr. Kelly Williams**, assistant professor and Program Director of the Advanced Dental Education Residency Program in Periodontics, had the following article published: “Should PGY-1 Be Mandatory in Dental Education? Two Viewpoints.” (J Dent Educ 2016 80:1273-1280)

**Dr. Christine Wankiri-Hale**, assistant professor and Associate Dean for Student Affairs, and Dr. Zsuzsa Horvath, assistant professor and Director for Faculty Development, had their article, “Training Future Dentists for an Academic Career: A Three-Tiered Model” published. (J Dent Educ 2016 80:502-516)

**PDA Recognizes Dr. Paul Moore**

I practiced general dentistry for several years in Oakmont, Pa., and then decided to pursue a full-time career in academic dentistry. Most of my career has focused on teaching pharmacology and dental therapeutics, providing anesthesia services, preparing grant applications, organizing clinical research projects, and publishing the findings primarily to dental practitioners. Being recognized by one’s colleagues with this special recognition award is quite gratifying. Thank you to my wife of almost 48 years, the members of the ADA, long enough to qualify for the senior dues rate, proving that good things like this honor may come your way if you live long enough.

“My dental career began with a great education at Penn State University and the University of Pittsburgh. I was provided with an opportunity to earn a master’s degree in pharmacology during my clinical years. I will always be grateful to Dr. James Smudski who developed the program and created a vision for me to consider a career in academic dentistry.”

Pitt Dental Medicine Leaders in ADEA and JDE

Please join us to honor Dean Braun

**SAVE THE DATE**

**CELEBRATION RECEPTION**

**FRIDAY, DECEMBER 8, 4-6 P.M.**

**CONNOLLY BALLROOM, ALUMNI HALL • 4227 FIFTH AVENUE, PITTSBURGH, PA 15260**
In Memoriam

Dr. Samuel H. Cohen (DMD ’70)
Dr. Lionel Carlos (DMD ’92; AEGD ’93)
Dr. Edward M. McHugh (DMD ’84)
Dr. Robert Londeree (DDS ’47)
Dr. Paul E. Keck (DDS ’57)
Dr. Michael T. Jupina (DDS ’63)
Dr. Bruce M. Heflin (MDS, Ortho ’68)
Dr. Barry W. Dahl (DMD ’71)
Dr. Robert E. Grill Jr. (DMD ’86)
Dr. Clifford C. Green (DMD ’80)
Dr. Albert M. Gosnell (DDS ’46)
Dr. William Ferianc (DDS ’53)
Dr. Frank L. Ceraso (DDS ’55)
Dr. Jack A. Weichman (DDS ’48)
Dr. Barry J. Weber (DMD ’85)
Dr. Jesse L. Moser (DDS ’45)
Dr. Carl Misch (MDS, Prostho ’89)
Dr. Charles J. Miller (DDS ’50)
Dr. Francis Panchura (DDS ’55)
Dr. Albert M. Gosnell (DDS ’46)
Dr. Edward M. Bender (DMD ’83)
Dr. Louis T. Mattioli (DDS ’54)

Recalling Faculty, Staff, and Friends

Dr. Frank L. Ceraso (DMD ’55) passed away on January 27, 2017. He was a faculty member in the Department of Periodontics.

Dr. Albert M. Gosnell (DMD ’46) passed away on January 24, 2017. He was a faculty member at the School of Dental Medicine.

Dr. Daniel Koch (DMD ’82) passed away on November 27, 2016. He was a clinical instructor at the School of Dental Medicine.

Dr. Robert J. McCormley (DMD ’62) passed away on December 26, 2016. Dr. McCormley served as President of the Dental Alumni Association from 1972 through 1973.

Dr. Robert S. Runzo (DMD ’52) passed away on July 10, 2017. Dr. Runzo served as the President of the Dental Alumni Association from 2001 through 2002. In 1999, the School of Dental Medicine recognized Dr. Runzo as the Distinguished Alumnus of the Year in Dental Medicine.

Recalling Faculty, Staff, and Friends

Dr. Louis T. Mattioli (DDS ’54)
October 25, 2016

Dr. Richard D. Maxwell (DDS ’64)
December 6, 2016

Dr. Edward M. McHugh (DMD ’84)
October 20, 2016

Dr. Herbert A. Mercier (DDS ’47)
April 24, 2017

Dr. Charles J. Miller (DDS ’50)
January 14, 2017

Dr. Carl Misch (MDS, Prostho ’89)
January 4, 2017

Dr. Jesse L. Moser (DDS ’45)
June 26, 2017

Dr. Francis Panchura (DDS ’55)
February 9, 2017

Dr. Paul Pecundani (DDS ’46)
December 29, 2016

Dr. William D. Thaler (DDS ’59)
May 10, 2017

Dr. Barry A. Warshal (DMD ’67)
December 14, 2016

Dr. Barry J. Weber (DMD ’85)
October 29, 2016

Dr. Jack A. Weichman (DDS ’48)
May 1, 2017

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2017-2018 Calendar of Events

August 28, 2017
General Assembly and White Coat Ceremony 3 p.m.
Scaife Hall
Auditoriums 5 & 6

August 30, 2017
Dental Alumni Association (DAA) Executive Committee Meeting and Board of Directors Meeting 5:30 – 6 p.m.
Scaife Hall
Room 457

September 16, 2017
School of Dental Medicine Alumni Weekend 10 a.m.
Tailgate prior to Pitt vs. Oklahoma State game at Noon.
Tailgate location is on the Great Lawn at the corner of North Shore and Art Rooney Avenue, to the southeast of Heinz Field.
See dental.pitt.edu for more details.

October 14, 2017
University of Pittsburgh Homecoming Weekend School of Dental Medicine Continuing Education Prathodontic Techniques for the General Dentist for the Restoration of The Destroyed Dentition - From Simple To Complex presented by Arthur M Rodriguez, BS, DDS, MD
Please see dental.pitt.edu to register and for more information.

October 15, 2017
Pitt vs. NC State
Time TBD
Contact: Pitt Ticket Office for game tickets at 800-643-PITT (7488) or 412-648-8740 online at tickets@athletics.pitt.edu

October 21, 2017
2017-2018 Dental Alumni Association (DAA) Executive Committee Meeting and Board of Directors Meeting 5:30 – 6 p.m.
Scaife Hall
Room 457

October 27, 2017
Pitt Make a Difference Day
9 a.m. – 3:00 p.m.
Join SDM students, faculty, and staff to show our school spirit and serve the community.
Please check our website or email Nancy Poe at poen@pitt.edu or 412-648-8510 by August 23, 2017 for more information.

September 15, 2017
School of Dental Medicine Alumni Weekend

No new or updates for the event.

October 14, 2017
University of Pittsburgh Homecoming Weekend School of Dental Medicine Continuing Education Prathodontic Techniques for the General Dentist for the Restoration of The Destroyed Dentition - From Simple To Complex presented by Arthur M Rodriguez, BS, DDS, MD
Please see dental.pitt.edu to register and for more information.

November 1, 2017
Nomination Deadline for Distinguished Alumni Awards.

February 16, 2018
Health Sciences Foundation Winter Academy Naples at the Ritz-Carlton, Naples
For more information, please contact Paul Casey at 412-383-7544 or nancy.poe@pitt.edu for game information.

Contact:
Nancy Poe
412-383-7544

APRIL 2018
April 7, 2018
Eighteenth Annual Dean’s Scholarship Ball 6 p.m.
Heinz History Center

April 7, 2018
Twenty-Fourth Annual Bowser Memorial Continuing Education Lecture Series 8:30 a.m.-1 p.m.
Scaife Hall
Auditoriums 5 & 6
To register please visit dental.pitt.edu to confirm attendance.

April 27, 2018
Alumni Reception at the PDA Pennsylvania’s Dental Expo 4 - 6:30 p.m.
Hotel Hershey

MAY 2018
May 18, 2018
Senior Luncheon and Senior Awards Ceremony 11:30 a.m.
May 19, 2018
School of Dental Medicine Diploma Ceremony 1 p.m.
Heinz Hall

For up-to-date details on any event listed, please visit dental.pitt.edu.