

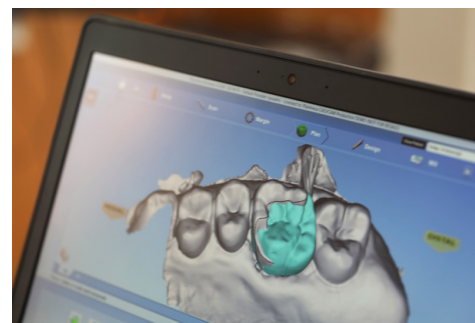
NEW PROS PROGRAM

PROSTHODONTICS RESIDENCY ADDING TO DEPTH OF SCHOOL'S SPECIALTY PROGRAMS

IN FEBRUARY, Penn Dental Medicine was awarded accreditation to launch a new advanced specialty program in prosthodontics and will welcome its first class of residents in July. This addition not only builds on the depth of the School's educational offerings (now bringing the total number of graduate specialty programs to nine), it will also enhance clinical services available to the public and research opportunities as well. And, with the latest digital technologies an integral part of instruction and patient care, it promises to be one of the most leading-edge programs of its kind.

The 36-month residency will accept four students per class and leads to a certificate in prosthodontics combined with a Master of Science in Oral Biology degree; graduates will meet the formal training requirements for the American Board of Prosthodontics certification exam. This is the first prosthodontics program in the nation to begin after the revised accreditation standards were instituted that recognize digital dentistry and surgical implant placement as integral parts of the specialty of prosthodontics. As such, in building the program from scratch, it has been developed around these standards to be at the forefront of the techniques and technologies advancing the field.

"Right now is an exciting time for prosthodontics. It has evolved like no other specialty in the last decade with the rapid advancement of digital dental technologies through CAD/CAM [computer-aided design/



computer-aided manufacturing],” notes Dr. Markus Blatz, Professor and Chair of the Department of Preventive & Restorative Sciences, who advocated for an accredited prosthodontics program and how it could add to the educational, patient care, and research missions of the School. “Our goal has been to design a program to be the embodiment of the future of prosthodontics.”

“This is great addition to our graduate education programs,” says Morton Amsterdam Dean Denis Kinane. “I believe it promises to prepare our prosthodontic residents not only to exceed the standards of today, but to lead the changes of tomorrow.”

OPPOSITE: Dr. Evanthia Anadioti, Founding Director of the Advanced Specialty Program in Prosthodontics, with Dr. Markus Blatz, Professor & Chair of Preventive & Restorative Sciences.

PROSPROGRAM

A VISION TO THE FUTURE

To help bring that vision to life, Dr. Blatz recruited Dr. Evanthia Anadioti, Clinical Assistant Professor of Restorative Dentistry, in 2015 to help develop and now serve as Founding Director of this new residency program. Prior to coming to Penn Dental Medicine, Dr. Anadioti was Clinical Assistant Professor at Boston University Henry M. Goldman School of Dental Medicine. She is a diplomate of the American Board of Prosthodontics, having earned both her certificate in prosthodontics and MS in Oral Sciences at the University of Iowa before completing a fellowship in surgical implant dentistry at the University of North Carolina. A native of Greece, she holds a DDS from National and Kapodistrian University of Athens.

“It feels like Penn was waiting for the right time to start an advanced prosthodontics program,” says Dr. Anadioti. “And with the tremendous technology available, the best time for prosthodontics is now. In creating the program, we’ve designed a curriculum to develop the next generation of leaders in our specialty.”



Uniquely positioning the program to provide residents experience with a dental technology laboratory specializing in CAD/CAM is the School’s CAD/CAM and Ceramic Center. Established in 2009 within the Department of Preventive & Restorative Sciences

“No other specialty is so heavily involved with the lab and having our CAD/CAM Center well established and heavily integrated will play an integral role in our students’ experience,” says Dr. Anadioti.

EXPANDING EDUCATIONAL RESOURCES

The clinical home for the prosthodontics program is the William W.M. Cheung Advanced Dental Care Clinic, located on the third floor of the School’s Robert Schattner Center. Along with chairside computers for accessing digital patient records and the availability of digital radiography and intraoral scanners, each operatory used by the residents will feature an operating microscope. Through a partnership with Carl Zeiss Meditec, the operatories are being outfitted with ZEISS Extraro® 300 surgical microscopes.

“This is the latest generation of microscopes and the illumination and magnification will be a tremendous tool in patient care; plus, we’ll gain the ability to document cases for research and education,” says Dr. Anadioti, explaining that each microscope also includes a high-definition camera for still-image capture and video recording or streaming.

“Now that all the traditional dental specialties will be represented through our educational programs, we can truly be full service in terms of clinical care and cater to all the different patient needs.”

— DR. MARKUS BLATZ

While maintaining a strong foundation in classic prosthodontics, a hallmark of the curriculum will be the incorporation of the latest applications of digital dentistry. “There will be full digital workflow integration,” explains Dr. Anadioti. “From the start of a case to the final restoration, our residents will be planning and executing cases digitally.” That ranges, she notes, from using digital radiographs, CBCTs, and intraoral scans for diagnosis, case planning, and digital smile design, to the 3D printing of surgical guides for implant placement and the chairside or laboratory milling of restorations.

and directed by Michael Bergler, MDT, it is dedicated to the study and application of the latest dental technologies in CAD/CAM and all-ceramic restorative materials. Over the past eight years, the Center has continued to be outfitted with the most up-to-date software and scanning and milling equipment, while being a leader in working with industry to help refine and develop the technology moving the field forward.

The prosthodontics residents will share the Advanced Dental Care Clinic with predoctoral students in the clinical honors program. The Clinic opened in 2010 to manage advanced cases in restorative and esthetic dentistry, and since then, has been the site of the Honors Program in Clinical Restorative Dentistry, open to qualifying fourth-year students.

From an educational perspective, honors students will benefit from the close proximity in the shared space and predoctoral students will rotate through the clinic, increasing their exposure to prosthodontics.

“The educational component of this new program is significant on a number of levels,” says Dr. Blatz. “We will establish a seamless teaching philosophy in prosthodontics from the preclinic through the postgraduate program. Then of course, the residents themselves will engage in teaching, and for our honors students, who have an interest in advanced restorative dentistry and prosthodontics, this offers a pathway for pursuing postdoctoral training and possibly even an academic career here at Penn.”

ENHANCING RESEARCH, SCHOLARSHIP

In creating the program, another priority was to ensure that residents not only developed clinical excellence using the latest technologies within prosthodontics but were also engaged in research leading the specialty’s evolution and impacting clinical techniques and outcomes. To that end, the residency is designed as a 36-month program that requires the research-focused Master of Science in Oral Biology to be pursued concurrently with the certificate in prosthodontics.

“Our goal is to develop clinician scholars and who are involved in academics, research, and new ways of thinking,” says Dr. Anadioti. “There are so many research topics within the digital realm that offer a huge opportunity for our residents to explore, and in turn, help lead clinical research in new directions.”

ABOVE: Intraoral scanners are one of the digital technologies used as part of case planning and digital smile design.

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— DR. EVANTHIA ANADIOTI



SERVING MORE PATIENTS

This new prosthodontics program may have the greatest impact through the expanded clinical services Penn Dental Medicine will be able to offer to a larger patient base, including individuals who are severely compromised and in need of comprehensive prosthetic and maxillofacial prosthetic treatment.

“Now that all the traditional dental specialties will be represented through our educational programs, we can truly be full service in terms of clinical care and cater to all the different patient needs,” says Dr. Blatz.

As part of the program, residents will do hospital rotations within both the Department of Oral & Maxillofacial Surgery/Pharmacology at the Hospital of the University of Pennsylvania and the dental department at the Philadelphia Veteran’s Administration (VA) Hospital. “Having these hospital rotations is going to enhance the program in so many ways,” says Dr. Anadioti, “exposing residents to different patient pools and types of cases.” She notes that there are a lot of patients needing extensive rehabilitations at the VA, and with only one staff prosthodontist, they are eager to have the residents support their patient care.

At HUP, the focus will be on maxillofacial prosthodontics. “Through surgery for cancer, a patient may lose an eye, an ear, a piece of their jaw — severely compromising their quality of life,” says Dr. Anadioti. “The recognized specialty to help restore their facial structures is maxillofacial prosthodontics.” To support this part of the program, maxillofacial prosthodontist Dr. Brian Chang was recently hired; he will work three days a week at HUP and teach at the School two days a week.

“This is an important piece of the puzzle,” adds Dr. Blatz. “Before, we didn’t have this type of training to treat this segment of patients. Now, through the residents’ education, a lot more people will be helped by this specialty care.”

It is the rewards that come with patient care that Dr. Anadioti says drew her to prosthodontics and what she believes will continue to attract students to the specialty. “As a resident when observing my faculty, I realized that a prosthodontist is like the conductor of an orchestra, bringing various specialists together and seeing the bigger picture — not only inside the mouth, but how that affects the person overall,” she recalls. “Changing someone’s life by restoring their smile, chewing function, or a part of their face is exceptionally rewarding, and I look forward to passing that along to our residents. Especially now, as the whole specialty is growing with tremendous technology, it is an exciting time to be starting a new program and an historic moment for both the specialty and Penn.” ■

— By Beth Adams

Learn more about prosthodontics care at www.penn dentalmedicine.org/prosthodontics