



## Alumni profile: Bernard J. Costello (D'94, M'97, GD'00, RES'00)

When Bernard J. Costello (D'94, M'97, GD'00, RES'00) was named Dean of the University of Pittsburgh School of Dental Medicine in 2018, he took inspiration for maintaining a robust surgical practice while carrying out his myriad responsibilities as dean from his time at Penn Dental Medicine.

When he started dental school in 1990, Dr. Raymond Fonseca was Dean. "I watched Ray be an effective dean, but also a relevant surgeon," Dr. Costello recalls. With that in mind, he has honed his own surgical practice to "a limited but very precise scope of practice" one day a week.

The rest of the time he puts on his tie and steps into his role as dean, working to guide the School of Dental Medicine in the "best possible direction." For Dr. Costello, this means growing the research enterprise — in particular translating basic research to clinical application; attracting top-tier faculty and researchers; enhancing dental education; improving the clinical experience for patients; fostering collaborations throughout the university and, not the least, raising funds to support these goals.

"The biggest challenge is having all the resources to do all the wonderful things you want to accomplish," he says. "Dental school is a very expensive investment for

our students, so we try to keep tuition as low as possible, and have enough money to hire the best talent and build the best clinic," he adds, while at the same time dealing with cuts in federal and state budgets and medical assistance programs.

### THE TOOLS TO BE SUCCESSFUL

After earning his B.S. at the University of Scranton, Dr. Costello came to Penn Dental Medicine knowing it was an institution "that valued scholarly activity, research and innovation as much as clinical training, and I wanted to be in that environment," he says. "Penn gave me all the tools I needed to be successful."

At Penn Dental Medicine, his path was influenced by Dr. Fonseca, an expert in cleft and craniofacial surgery, and Dr. Peter Quinn, D'74, GD'78, Schoenleber Professor of Oral & Maxillofacial Surgery/Pharmacology at Penn Dental Medicine, Vice Dean for Professional Services, Perelman School of Medicine, and Senior Vice President, University of Pennsylvania Health System.

After completing his oral surgery training at Penn, Dr. Costello was accepted to a new fellowship program at Georgetown University Medical Center that "combined what I loved about oral and maxillofacial surgery with pediatric craniofacial training."

Since joining Pitt's Department of Oral and Maxillofacial Surgery faculty in 1991, he has served as Senior Associate Dean and Director of Translational Research and the Oral and Maxillofacial Surgery Residency Program and is currently Director of the Pediatric Cranio-maxillofacial Surgery Fellowship Program.

In addition to his position as Dean and Thomas W. Braun Endowed Professor, Dr. Costello serves as chief of the Division of Craniofacial and Cleft Surgery in the School of Dental Medicine and the Division of Pediatric Oral and Maxillofacial Surgery at Children's Hospital of Pittsburgh.

### AN ADVOCACY ROLE

Cleft lip and cleft palate are the most common birth defects in the U.S., affecting one in every 600 newborns, according to the American Cleft Palate-Craniofacial Association, for which Dr. Costello served as president last year. These defects occur very early in pregnancy and often can be detected after approximately 12 weeks through routine prenatal imaging.

"One fun part of my job is I get to meet some of these kids through an ultrasound," Dr. Costello says. "It's an opportunity to meet the parents before delivery and put them at ease."

While cleft lips and palates are fairly common, Dr. Costello says there are about 400 syndromes of the head and neck that can result in face and skull deformities. While his surgical skills can correct many of these problems, Dr. Costello also serves as an advocate for patients.

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— DR. BERNARD J. COSTELLO

Recently, he and two colleagues admonished talk show host Wendy Williams for mocking the upper lip scar on actor Joaquin Phoenix. In a January 23 article in the online forum “The Conversation,” the authors used the teachable moment to explain what a cleft lip is and note that those with facial differences “often feel stigmatized and can face discrimination and social isolation.”

In the laboratory, he’s encouraging research that can lead to workable solutions for patients by enhancing opportunities to “put clinicians together with researchers to solve problems.” His own research has focused on regenerative medicine, using the body’s own tissues and resources for healing, including work on bone scaffolding and bone tissue engineering.

One promising innovation is the use of resorbable metal magnesium to promote bone regeneration in facial surgery. The magnesium ion, which like calcium dissolves over time, offers a multitude of advantages over commonly used titanium plates and screws, which can attract bacteria and become infected. The resorbable material also eliminates the need to surgically remove those metal parts that children frequently outgrow. The research, which Dr. Costello believes could be “revolutionary,” is in pre-Food and Drug Administration trials, but could be available for use in the next several years.

While he has outlined an ambitious agenda as Dean, Dr. Costello says his experience at Penn Dental Medicine prepared him for the challenge. But with schools of similar size and scope at opposite ends of the state, he also acknowledges that he competes for talented faculty and students with his colleagues at Penn.

“But that’s okay,” Dr. Costello says, “we’re all trying to get better and make each other better. Institutions like ours are built to innovate and train the best scientists and practitioners to take the field to the next level.”