



Left to right: Dr. Bruce Johnson, Dr. George Levicki, medical student Robert Brown, Dr. Charles "Bud" Conklin, and Dr. Peter Lockhart



Healthy Curriculum

Delta Dental foundation advances oral health education

by CHRISTINA KOOMEN
photos by LOGAN WALLACE

At the second annual Delta Dental of Virginia Oral Health Lecture at the Virginia Tech Carilion (VTC) School of Medicine earlier this semester, one of the introductory speakers, third-year VTC student Robert Brown, conceded that the connection between oral health and general health was "something I did not fully appreciate before I came here."

Then he shared with the audience the story of a terminally ill oral cancer patient whom he and other members of his class met during a visit to Carilion Clinic's dental facility. Brown described how, despite the advanced state of her disease and what must have been severe pain, the patient couldn't stop smiling as she shook students' hands and congratulated them on being part of the school's groundbreaking new oral health program.

"According to her daughter, it was her strong desire to meet us and help to teach us that kept her going," Brown recalled. "She told us that she wanted us to be the best doctors."

The VTC School of Medicine, which welcomed its first class of students in fall 2010, is one of the few medical colleges in the U.S. to include an oral health component in its training for all students. The program

was launched with philanthropic assistance from the Delta Dental of Virginia Foundation, which recently followed up with a \$1 million endowment to help sustain the oral health curriculum. Funds from the endowment will also be used to support clinical rotations, service-learning projects, research scholarships, and the development of standardized patient cases.

"The oral health program positions the Virginia Tech Carilion School of Medicine as a thought leader and an innovator in the educational process," said Dr. George A. Levicki, president of the Delta Dental of Virginia Foundation Board of Directors. "It represents a true advance in the practice of medicine and how to incorporate the growing body of evidence that suggests important links between good oral health and good overall body health."

In the evolution of medical practice, general and dental health care have experienced a somewhat on-again, off-again relationship. Delta Dental Lecture keynote speaker Dr. Peter Lockhart, chair of oral medicine and director of the Institute for Oral Medicine at Carolinas Medical Center in Charlotte, N.C., pointed out that no less a figure than early American physician Benjamin Rush, a signer of the Declaration of Independence, advocated the extraction of teeth in order to cure a wide variety of diseases. But the two fields began to diverge with the establishment in 1840 of the Baltimore College of Dental Surgery, the first dental school in the world. Although the college distinguished dentistry as a profession in its own right, it also institutionalized the separation of oral health from general medical education.

But over the past decade or so, research has begun to revive awareness of the connections between oral health and other medical conditions, ranging from coronary artery disease and diabetes to low birth weight in newborns. The VTC curriculum "establishes the intercollaborative aspect of medicine and dentistry on patient management" for a new generation of practitioners, according to Dr. Charles "Bud" Conklin, associate professor in the Department of Surgery at VTC and section chief for dentistry at Carilion Clinic.

"Most physicians have anywhere from no training in oral health and oral medicine to maybe four hours, tops," said Conklin, who has been with Carilion for 33 years and is one of the chief architects of the new program. "In the Virginia Tech Carilion School of Medicine curriculum, we're looking at 32 hours of both clinical and didactic exposure in the first two years, plus testing to make sure they have mastered the skills."

One major reason for creating the oral health curriculum was to improve oral cancer survival rates. Conklin noted that about 40,000 people in the U.S. develop some form of oral cancer each year, but many cases are diagnosed late. This is largely because the elderly are at highest risk but dental visits tend to fall off after age 65, often for financial reasons. However, physician visits by older patients tend to remain steady, so if a doctor is trained to spot the signs of oral cancers, early diagnosis is more likely to occur, and more lives are likely to be saved.

VTC's oral health program comprises three basic components. First-year students learn oral anatomy and how to do an oral

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examination. In the second year, students take part in a comprehensive week of oral medicine training, using a case-based learning approach. This immersive experience includes examining a variety of oral pathologies, analyzing cases in depth, and even drilling into mock-ups of good and bad teeth to feel the difference. In years three and four, students will have the option of taking electives to gain more advanced knowledge.

Ultimately, Conklin hopes that doctors will add the patient's mouth to the standard physical exam repertoire that includes the head, eyes, ears, nose, and throat. This approach may already be gaining traction at Carilion Clinic.

"One of our faculty members, a family practice physician, captured the value of this model best when she said that it had led her to change the way she performs her own patient exams," said, Dr. Cynda Johnson, VTC dean. "We hope this innovative program will continue to inspire physicians to perform oral exams and ultimately to improve health outcomes for patients everywhere."

It has certainly resonated with VTC students like Brown, who concluded his remarks at the lecture by emphasizing: "To be the best doctors, we must understand oral health." □

Christina Koomen was a writer with University Development.

Dr. Charles "Bud" Conklin (above left) in an instructional setting