

SCIENCE IN THE REAL WORLD



UF part of network
that brings research
to dental practice



Deborah McEdward, Dr. Valeria Gordan and Pearl Ann Harris (from left) present Dr. Marion B. Jackson with a poster commemorating his co-authorship of a Dental Practice-Based Research Network study on the practice of rating dentists' technical skills.

By Laura Mize

The Dental Practice-Based Research Network brings something to dentistry that the medical community has had for years: an organized effort to conduct research amid the everyday practices and challenges of providing care.

"We are working with real-world dentistry in our research, rather than the perfect bench-top situation," explained Deborah McEdward, R.D.H., an education and training coordinator in UF's DPBRN office.

Although research conducted in a lab is often the first step in developing a product or technique, these efforts don't always translate easily to patient care, McEdward said.

"What works in a perfect environment often does not work in the real world," she said.

Valeria Gordan, D.D.S., M.S., M.S.C.I., a professor of dentistry, is the program's principal investigator at UF. She and her staff of specially trained coordinators, all dental hygienists, work with researchers from the network's other member institutions — the University of Alabama at Birmingham, the University of Copenhagen and some locations of the health-care organizations HealthPartners and Kaiser Permanente Dental Associates — to develop studies and train practicing dentists and their staff members to carry out the research.

The program began in 2004 when the National Institutes of Health picked UF, UAB, New York University and the University of Washington to receive a collective \$75 million

to establish three networks focused on conducting research in dental practices across the country. The NIH selected UF and UAB as joint grant recipients and charged the two institutions with bringing others into the network they would form. The DPBRN received \$25 million from the NIH to fund its work. NYU and UW established separate, but similar, networks.

DPBRN staff members write scholarly articles based on study findings, which they or the practicing dentists present at conferences.

"Private practitioners and university (researchers) ... don't usually work together," said Pearl Ann Harris, R.D.H., an education and training coordinator. "To have a practitioner come to an international research meeting is a really big deal."

The network oversees studies in four U.S. regions and in Scandinavia. More than 1,300 practitioner-investigators have signed up to participate.

The network's annual meetings foster discussion about research ideas and questions between dentists working in private practice, something that otherwise doesn't happen too frequently, Gordan said.

Some dentists indicated in a post-meeting questionnaire that they had adopted a more conservative approach to treating cavities after talking with their colleagues.

One dental office studying the practice of measuring patients' blood sugar permanently implemented the test after a dramatic event emphasized its importance. One patient was sent to the emergency room after the dental staff found the person's blood sugar was dangerously high during a test for the study.

"Our actual test patient could very well have lived just because they were in our study," McEdward said. "Doing that kind of testing, especially when we know that pre-diabetes is practically epidemic in this country, and incorporating that in dental care is really an important thing. That's one of the ways that we're trying to expand where dentistry is involved with patient care."

Now, the DPBRN is working on an application to secure the next NIH grant: a single \$70 million award to establish a nationwide research network.

Gordan said she's optimistic about the network's chances of being selected to lead the national initiative.

But even if one of the others prevails, Gordan said she's glad to know dental practice-based research will continue to spread in the U.S.

"Even if we don't get it, it's good for the world of practice-based research that NIH is showing a long-term commitment to continue with this," she said. **P**