



## under the microscope

by THERESA CASSIDAY

**ser·en·dip·i·tous** (n). 1. Come upon or found by accident; fortuitous. 2. Good; beneficial; favorable.

The events that have led Jeffrey Payne, D.D.S., from the East Coast to Nebraska have, indeed, been serendipitous.

Dr. Payne grew up in New York, received his D.D.S. from State University of New York at Stony Brook, and completed his periodontology residency and master's degree at the University of Connecticut. But after all of that, academic dentistry jobs in the east were few.

After applying for positions in several schools, the dean of the University of Connecticut dental school advised him to go west – to Nebraska. Dr. Payne listened. Although he received offers from three universities, he chose UNMC.

Fifteen years later, Dr. Payne is now professor, associate dean for research and F. Gene and Rosemary Dixon Endowed Chair in Dentistry at the College of Dentistry. A practicing periodontist, he also is conducting clinical trials using low-dose doxycycline to treat bone loss in postmenopausal women.

The latest research twist is discovering that this treatment may beneficially affect heart disease. Dr. Payne has been collaborating with Lorne M. Golub, D.M.D., at Stony Brook University, whose research shows that small doses of doxycycline reduce C-reactive protein levels in patients with acute coronary syndromes. This marker of inflammation may predict heart disease.

Serendipitously, Dr. Payne's two-year clinical trial had already enrolled 128 post-menopausal women with osteopenia and periodontitis from whom blood samples had been taken throughout the study. With patient permission and additional National Institutes of Health funding, testing has begun to measure markers of inflammation in these samples.

"Our question is this: Does doxycycline reduce the inflammatory factors that are implicated in cardiovascular disease and periodontal disease?" Dr. Payne said.

As he explores these connections, Dr. Payne continues to deal with one of the most ironic twists in his life: his name.

"I get some grief about being a dentist named Dr. Payne," he said with a grin. "But at least the patients remember me!"

Then Randall Toothaker, D.D.S., joined the faculty. 

