

## Stanley van den Noort, M.D., '52: MS pioneer

By Laura Jean Whitcomb

I don't know how to spend 15 minutes per patient," says neurologist Stanley van den Noort, M.D. In fact, it's not unusual for the 1952 DMS graduate to spend over an hour in conversation with a single patient. "I may not make a lot of money, but that's the way I did it in 1954 and that's how I'm doing it in 2004."

Van den Noort, a professor and the former chair of neurology at the University of California-Irvine (UCI) College of Medicine, is a pioneer in multiple sclerosis education, research, and patient care. At age 73, he still works 70 hours a week—seeing patients with multiple sclerosis (MS) and other neurological disorders, conducting research, and participating in other professional activities.

MS, a progressive autoimmune disease of the central nervous system, affects some 400,000 people in the United States and as many as 2.5 million people worldwide. Van den Noort has described MS as a "disease of an over-muscled immune system" because the body's own chemical defenses destroy its myelin, the fatty white sheath that surrounds the nerve cells in the brain, eyes, and spinal cord. Hardened, sclerotic tissue replaces the myelin, sometimes permanently severing the underlying nerve fibers in multiple places—thus the name multiple sclerosis. Making a diagnosis is difficult, however, because the symptoms of MS are unpredictable—they vary from person to person and from time to time in the same person. Van den Noort has been at the forefront of MS research and treatment since he began caring for patients with the disease in the 1960s.

"Dr. van den Noort is the consummate clinician and a doctor's doctor," says Murray Korc, M.D., who before his recent appointment as DMS's chair of medicine worked for 12 years with van den Noort at UCI. "He is exceedingly knowledgeable in all fields of medicine, interprets brain MRI studies like a seasoned neuroradiologist, and cares tremendously about his patients. They, in turn, adore him," Korc adds. "He is truly an exceptional individual."

One might expect that such an exceptional individual would have had childhood dreams of becoming a physician. But not van den Noort. He initially planned to be a historian until his father persuaded him to follow in the footsteps of his older brother—the late Gordon van den Noort—a Dartmouth alumnus (Class of 1944) and a talented neurosurgeon. "My father believed that being a historian was a bad way to make a living, and in those days you did what your father said," says Stanley van den Noort.

In 1947, van den Noort was barely 17 when he left his home in Lynn, Mass., and headed to Dartmouth College. "I had a wonderful time at Dartmouth," he recalls. "Half my class was World War II vet-

erans who taught me how to smoke, drink, and raise hell. I was a good student," he laughs. But as a premed on a full-tuition scholarship, he studied hard, too. In addition, van den Noort made time for his interests in French literature and art history, studying under Professor Ramon Guthrie, "an authority on all things French. I've been a Francophile ever since," van den Noort says.

He graduated from Dartmouth College in 1951 and Dartmouth Medical School in 1952, then completed his M.D. at Harvard in 1954. At Harvard, his interest in the nervous system was kindled by a pair of world-renowned neurologists—Derek Denny-

Brown, M.D., and Joseph Foley, M.D. By the age of 24, van den Noort was a doctor and newly married to June LeClere, a graduate of the Mary Hitchcock School of Nursing. His goal was to return to New Hampshire and practice general internal medicine. "I thought it would be a wonderful life," he says.

First, of course, he had to complete his training. So he started a residency in medicine at Boston City Hospital. Then, in 1956, he was called up for military service and became a lieutenant in the U.S. Navy. After three months, he was made head of neurology at the Naval Hospital in Chelsea, Mass.

In 1958, he returned to Boston City Hospital to do residencies in neurology and neuropathology and a fellowship in neurochemistry. He studied neurochemistry and neuropathology under Dr. L. Lahut Uzman, a "brilliant" neurochemist who had been made chief of pediatric neurology at Harvard when he was 35 years old. "We studied the chemicals that run the brain," recalls van den Noort, who was Uzman's first and only postdoctoral student before Uzman's untimely death in 1962. "It was a beginning era then, very young and very exciting." Van den Noort was even able to see the "before" and "after" of several neurological diseases, since half his neuropathology cases were patients he had seen as a resident the year before.

By 1962, van den Noort was ready for a change. He joined Foley, who had moved to Cleveland, and was appointed an assistant neurologist at the University Hospitals of Cleveland and a member of the faculty at Case Western Reserve. It was in Cleveland where van den Noort grew interested in MS, partly because he was seeing so many more patients with the disease than he had in Boston.

As research funding became tight at private medical schools in the late 1960s, van den Noort was ready to make another change. "If you didn't have a grant, you didn't have a job," he explains. He began to look for a post at a publicly funded institution. At a conference, a friend told him the University of California at Irvine was looking for a chief of neurology. "Tell them I'm coming," Van den Noort said.

He landed at UCI in 1970—as a professor of neurology and

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Freelance writer Laura Jean Whitcomb, formerly a writer and editor in Dartmouth-Hitchcock Medical Center's Office of Public Affairs, has written extensively about health care.

the school's only full-time neurologist. Just three years later, he was appointed dean of the school, a capacity in which he served until 1985.

During his tenure as dean—in 1976—UCI took title to Orange County Medical Center and renamed it UCI Medical Center. That gave the medical school a hospital in which to train future doctors, to conduct research, and to offer subspecialty care. “While medical students and residents trained at the county hospital and other area hospitals prior to 1976,” says van den Noort, “it was critical for UCI to have its

own facility.” His leadership was also marked by the expansion of UCI's neurology department to 16 people and the establishment of a Multiple Sclerosis Center on campus.

But as dean, van den Noort didn't have as much time for his research as he would have liked. So he stepped down from the post in 1985 and, he says, “took two weeks off and then went back to my old job” as a neurologist. Soon he was named chair of neurology and had resumed his research, too.

Specifically, he has studied the neurochemistry of lymphocytes—the white blood cells responsible for an immune response—in spinal fluid. There are two types of lymphocytes: B-cells, which make antibodies to attack bacteria and toxins, and T-cells, which attack the body's cells when they have been taken over by viruses or have become cancerous. In his research, van den Noort has found that “the B-cells are hypermutated, already processed by the lymph node, and have a presence in spinal fluid very early—possibly as early as the first episode of MS.” Some day, he hopes, “these changes in B-cells can help us make a diagnosis much earlier than an MRI, which is usually done 10 years too late. It's a thesis I'm still working on today.” (As it happens, several other leading immunology researchers are located at van den Noort's alma mater—DMS's William Hickey, M.D.; Lloyd Kasper, M.D.; and Randolph Noelle, Ph.D. A story about Noelle's latest finding is on page 4 in this issue.)

The fact that MS is a tricky disease to diagnose means people can suffer for decades—going to see podiatrists for foot problems, going to see ophthalmologists for vision problems, undergoing back surgery—before it's determined that they have MS. The MRI is considered a useful diagnostic tool because it can reveal whether there are MS-type lesions, plaques, or scarring in the brain. But van den Noort hopes his research will lead to the development of blood tests that may, one



Van den Noort—pictured here in person and on-screen—was the guest of honor at a recent event at the University of California at Irvine, which he's served for 33 years.

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day, enable doctors to diagnose MS earlier than an MRI can.

In addition to conducting his own research, van den Noort was an early advocate for increased funding for neurological research. The 1970s and 1980s represented “an explosive era for progress in cancer, stroke, and heart disease treatment and prevention,” he says, “but neurosurgery funding had been neglected.” During the 1980s, “Congress was considering a Year of the Disabled. I said, ‘To hell with that, let's do a Decade of the Brain.’” He says he and one of his patients—James Roosevelt, FDR's son and a former U.S. rep-

representative from California—helped push the idea through Congress. The 1990s were ultimately designated the “Decade of the Brain” to enhance public awareness of the benefits of neurological research.

Van den Noort's other national activities have included serving on editorial boards and holding leadership roles in organizations like the National Multiple Sclerosis Society. Although he isn't as involved nationally as he used to be, van den Noort still sees patients around the clock, in his office and at home.

“Dr. van den Noort is truly an outstanding clinician and clinical scholar and a very devoted physician,” says long-time colleague Thomas Cesario, M.D., the current dean of the UCI College of Medicine. “His greatest contribution is the exceptional multiple sclerosis clinic he has established here at UCI. He treats patients from all over the world and uses the latest developments to assist them.”

One of those developments that van den Noort advocates for his MS patients is early and aggressive treatment. Before 1994, people with MS were treated primarily with steroids, but now there are four safe drugs on the market that, if given early, can alter the course of the disease. “I've been an early, aggressive treater for a long time,” says van den Noort. “The drugs are expensive and not always perfect, but the results have been quite striking. We are able to get people functioning again.” He even persuaded the MS Society to issue statements affirming that early treatment is important.

But most important of all, he says, is spending time with patients. “Medicine, in general, has become too technical,” he asserts. “I believe that 80 percent of diagnosis is conversation, 10 percent is taking history, and 10 percent is technology. Physicians need to spend more time with their patients and less time with technology. Listen carefully to patients, and they will usually tell you their diagnosis.” ■