



PATIENCE AND CARE—Dr. Elizabeth King, who does burn research during the day at Duke University Medical Center, follows the ancient art of bookbinding at night. Here she teaches Clark Luikhart, a graduate student in adult education at U.N.C., how to sew "signatures" together. (Photo by David Williamson)



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Levy, Day, McCord and Roses Selected

MS Society Announces Grants

Between the ages of 20 and 40, during the critical years in career and family building, thousands of young adults in the United States learn from their physicians each year that they have multiple sclerosis.

A chronic, crippling disease of the central nervous system, MS currently afflicts more than 500,000 Americans.

At present there is no known cause and no known cure.

In an effort to learn more about the causes of MS, the National Multiple Sclerosis Society has awarded four researchers at the medical center grants totaling \$81,030. Announcement came today from Dr. R. P. Moore, chairman of the Triangle North Carolina Chapter of the Society and a faculty member at N. C. State University.

Drs. Nelson L. Levy, assistant professor of immunology, Eugene D. Day, professor of immunology, Joe M. McCord, associate in biochemistry and medicine, and Allen D. Roses, assistant professor of neurology, have received grants of \$37,366, \$23,369, \$15,000 and \$5,295, respectively.

The awards range from six months to a year and a half and will count toward Duke's \$162 million Epoch Campaign, a fund-raising effort begun in November, 1973, which already totals more than \$50 million.

The major aim of Levy's research is to identify a possibly unique MS antigen (protein not normally found in the body) which may relate to the cause of the disease. In preliminary studies, the investigator found combinations or "complexes" of antigens and antibodies (substances which the body's immune system produces in reaction to antigens) in the spinal fluid of some MS patients.

He also hopes to see if the presence of these "complexes" is useful in the diagnosis and classification of multiple sclerosis.

Day and his associates plan to study antibodies associated with experimental allergic encephalomyelitis (EAE) in rats. EAE is a disease that can be induced in

laboratory animals and bears some resemblances to multiple sclerosis. It is produced in the rat by inoculations of a basic protein extracted from nerves in the animal's brain and spinal cord.

Using different methods from those previously employed for separating diseased brain tissues, Day hopes to preserve the structural integrity of cellular and subcellular membranes. He believes the methods he is attempting to develop for examining brain antibodies in rats may subsequently be directly applicable to a search for similar antibodies in the

blood and spinal fluid of patients with MS.

McCord has been engaged in research on a chemical known as superoxide dismutase since his participation in its discovery in 1968. This enzyme, produced by the body to "scavenge" or neutralize superoxide (a potentially harmful by-product of oxygen metabolism), is less prevalent in the spinal fluid of multiple sclerosis victims than in the spinal fluid of healthy persons.

With the aid of the society's grant,

(Continued on page 2)

yarns of yesteryear and today, about rich men and poor men, saints and scoundrels, good times and bad.

Dr. King, however, carries her interest in books a bit further than most people.

She takes injured books and makes them well again.

Dr. King practices the ancient art of bookbinding, a profession which predates the printing press by many centuries. She has been a binder of books for the past five years, and she's taken lessons in the craft from Edward McLean, a master bookbinder who created fine bindings for many of the volumes in the university's Rare Book Room.

"Books are just my thing," the researcher and mother of four boys said. "I'm in love with them. I always wanted to have a fine library with leather-bound books of my own, but I knew I'd never be able to afford one, so I started binding them myself," she added.

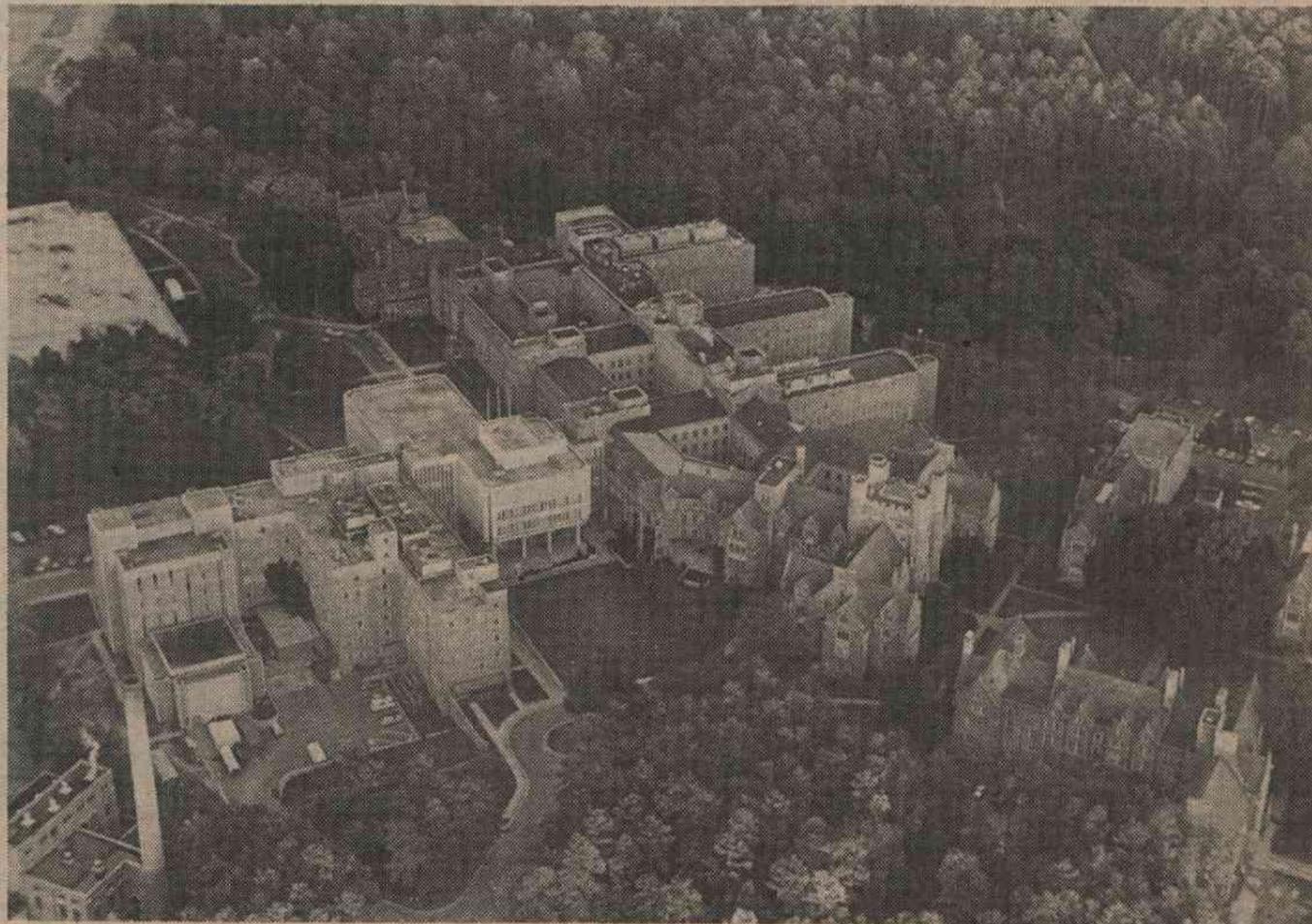
But as luck would have it, Dr. King's skills have brought a host of requests from friends, and she spends a large part of her hobby time binding the books of others. Also, she repairs books in the medical school library's valuable Trent Collection.

"My own library isn't growing very fast at this rate," the Duke alumna admitted with a smile.

Bookbinding in the old style consumes a lot of time. A complete job of binding takes anywhere from 10 to 15 hours of actual work, she explained, and then depending on the weather and humidity, perhaps a week or so to dry.

You need a fair amount of equipment to do it properly, and the imported Nigerian goatskin most popular in bindings runs about \$5 a square foot. Since Dr. King can't possibly charge a firm hourly rate for each of her creations, she isn't getting rich in this line of work either.

(Continued on page 2)



BIRD'S EYE VIEW OF WHERE YOU WORK—For employees of the medical center, each day brings the sight of corridors, offices, clinics and laboratories, not to mention patients and fellow employees. INTERCOM editor David Williamson, who has just completed work toward a commercial balloon pilot license, flew over the medical center last week and got a different perspective of what it all looks like. For an idea of how the main quadrangle, the Chapel, Bell Bldg. and the new Seeley G. Mudd Library and Communications Center appear to feathered creatures making their way south for the winter, please turn to page 4.