

KANNAPOLIS, N.C. Sept. 20, 2014—With no cure or diagnostic test, multiple sclerosis remains a mysterious and unpredictable disease affecting as many as 400,000 people in the United States.

The Duke-MURDOCK Multiple Sclerosis Study aims to change that. To better understand the disease and its progression, the study needs about 450 more people diagnosed with MS to enroll in the Kannapolis-based research project.

Multiple sclerosis affects the brain and spinal cord, resulting in loss of muscle control, vision, balance and sensation. When someone has MS, the body's own immune system directs an abnormal response against the central nervous system.

Some people suffer daily from the debilitating symptoms of MS, while others have symptom-free periods interrupted by relapses. Although we have known about multiple sclerosis for centuries, researchers still do not understand how the disease progresses and why certain people respond to treatment while others do not.

A team led by Dr. Simon Gregory, principal investigator of the MURDOCK Multiple Sclerosis Study and associate professor of medicine at the Duke University Medical Center, is collaborating with local healthcare providers and researchers to find the answers. With operational support from the Duke-MURDOCK Study office in Kannapolis at the North Carolina Research Campus, Dr. Gregory and his clinical research team have recruited more than 555 people with MS. Each has contributed small samples of blood and urine, as well as two questionnaires related to medical history and demographics and MS diagnosis.

Dr. Gregory's team is also recruiting a subset of 100 people afflicted by Primary Progressive Multiple Sclerosis. This effort is one of the few in the world of its kind. The MURDOCK Study places no geographic limitation on recruitment into either of the MS studies, and anyone who suffers from the disorder may enroll, regardless of home address.

"It is only through the selfless participation of MS patients that we have been able to look for biomarkers of chronic immune system challenge, to go beyond the role that single genes may have in MS, and to explore the impact that non-DNA based mechanisms may have in the development of the diseases," Dr. Gregory said. "Simply put, the MS community has provided the inspiration to find a cure to the disease."

Dr. Gregory's team has the potential to develop tests that physicians would use to diagnose MS and determine which treatments are best for individual patients based on their genetic profile.

If you or someone you know has MS and would like to learn more about enrolling, please contact the MURDOCK Study office at 704-250-5861 or visit www.murdock-study.org. This is not a drug study, so participants will not receive any form of treatment. Enrollment is easy. A visit takes less than an hour, and volunteers are compensated.

People without multiple sclerosis who live in certain zip codes (see the table) can still participate in the MURDOCK Study by enrolling in the community registry, which is recruiting 50,000 participants. Call 704-250-5861 or visit www.murdock-study.org.

The MURDOCK Study stands for the Measurement to Understand the Reclassification of Disease in Cabarrus/Kannapolis. David H. Murdock, founder of the North Carolina Research Campus, donated \$35 million to Duke University in 2007 to launch the long-term genomic study that is banking samples of blood and urine from the local community to better understand genetic and molecular data. MURDOCK researchers are working to improve treatments for heart disease, obesity, osteoarthritis, hepatitis C, osteoarthritis and Alzheimer's, as well as multiple sclerosis.