



For Immediate Release

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Discovery MS Launches at NC Research Campus

Discovery MS, a non-profit research initiative located within the David H. Murdock Research Institute (DHMRI) on the NC Research Campus, just north of Charlotte, NC, launched with an announcement of several ongoing multiple sclerosis research projects.

*Kannapolis, NC—November 8, 2016—*People with multiple sclerosis (MS), scientists and philanthropists joined together this week to launch Discovery MS, a non-profit research initiative located within the David H. Murdock Research Institute (DHMRI) at the NC Research Campus (NCRC). Discovery MS is accessing private research dollars to unlock scientific discoveries that could help develop new prognostic and diagnostic tools for MS.

Private Funding Model

At the November 7 Discovery MS launch event, Jason Cox, a board member of the J. Cox Family Foundation, presented Simon Gregory, PhD, Discovery MS Principal Investigator and Duke University Professor of Neurology, with \$8,000 as the first installment of a five-year pledge. Cox, who has suffered with MS for 22 years, understands the debilitating nature of the inflammatory autoimmune disease that affects the ability of the brain and spinal cord nerve cells to communicate, resulting in physical and cognitive disability for 2.5 million people worldwide.

“We support the work of Discovery MS because it is exploratory research,” Cox said. “They are looking for the next avenue to cure, diagnose and prevent this disease. We support Simon’s work and are going to reach out to a lot of other foundations.”

Herman Stone, CEO of Stone Theaters, provided the initial funding for Discovery MS. Stone and Cox share the goal of raising \$1 million a year for the next five years to support Discovery MS and Gregory's research.

"Simon continues to exceed my expectations," Stone commented at the launch event. "The exciting work that he is doing plus his commitment to all of the folks who have MS makes this one of the most important projects in the country."

Collaborative Research

With the fundraising and business expertise of Stone and Cox supporting him, Gregory, who is recognized for identifying in 2007 the genetic connection between the *ILR7* gene and MS, is focused on several investigations in collaboration with scientists from North Carolina to Australia. Their work includes:

- A new model to distinguish Beta-interferon responders and non-responders. Beta-interferon is a treatment used to slow the progression of MS.
- The development of biomarker signatures to predict the development of MS.
- Gene expression studies in longitudinal samples of patients with primary progressive MS to determine markers and mechanisms of disease progression.
- Novel therapies that moderate immune cell expression, treat inflammation and promote remyelination.
- Development of a smartphone app to track symptoms for presentation to health care providers and to identify signatures of disease progression.

Discovery MS evolved from Gregory's work as the director of DHMRI's Genomics Laboratory and as the principal investigator of three MS sub-studies of the Duke University MURDOCK Study, a longitudinal clinical research project that has collected biospecimens and health information from more than 12,000 participants. Both DHMRI and the Duke-MURDOCK Study are located on the NCRC in Kannapolis, NC. Discovery MS is part of the DHMRI, and many of the studies underway use biospecimens donated by the 976 participants of the MURDOCK MS Study. A MURDOCK sub-study focused on primary progressive MS is still collecting serial samples.

"The advantage Discovery MS has in conducting MS research is that the DHMRI provides the infrastructure to carry out the experiments underlying the research avenues we are pursuing," Gregory said. "By having a collection of biospecimens so generously donated by people with MS as part of the MURDOCK-MS study, we can take a multi-dimensional approach. We don't have to limit ourselves to just looking at the genetics or the function of gene expression. We can do that in combination with metabolomics, proteomics and clinical data to enhance discovery and approach a cure."

About Discovery MS

The goal of Discovery MS is to promote fuller, more active lives for people with MS by advancing the understanding of the origins of MS and improving diagnosis, prediction of disease progression, and assessment of treatment efficacy. Learn more at www.discoveryms.org.

About Duke University's MURDOCK MS Study

The MURDOCK Multiple Sclerosis Study is a cohort of the MURDOCK Study (Measurement to Understand the Reclassification of Disease of Cabarrus/Kannapolis), Duke University's longitudinal clinical research initiative working to reclassify health and disease and advance precision medicine. The MURDOCK MS Study aims to identify biomarkers to better predict the onset and progression of multiple sclerosis. The MURDOCK Study began in 2007 at the North Carolina Research Campus in Kannapolis, NC, and is led by L. Kristin Newby, MD, MHS, professor of medicine in the Division of Cardiology at Duke University School of Medicine. To learn more, visit www.murdock-study.org.

About the David H. Murdock Research Institute (DHMRI)

The David H. Murdock Research Institute (DHMRI), located on the NC Research Campus in Kannapolis, NC, collaborates with companies, institutions and researchers throughout the world to integrate genomics, metabolomics, proteomics, analytical sciences, cellular sciences and bioinformatics to make food nutritious, therapies effective, prevention possible and people healthier. To learn more, visit www.dhmri.org.

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