At NYU Langone, Dr. Moore found an environment that gave her The Freedom to take risks and move in new directions, resulting in transformative research.
When she joined NYU Langone Medical Center in 2010, Kathryn Moore, PhD, recalls being particularly impressed by the equal opportunities offered to women at the Medical Center. Since then, she’s made the most of an environment that has given her the freedom to take risks and move in new directions with her research focusing on why inflammation persists in cardiovascular disease, diabetes, and Alzheimer’s.

Multiple high-profile publications from her laboratory have identified key molecules driving the chronic immune reaction. Among them, Dr. Moore and her team discovered that a protein called netrin-1, normally associated with guiding nerve cells during development, can unexpectedly promote inflammation as well as atherosclerosis. Motivated by that finding, she is now looking at how the same molecule may influence inflammation in type 2 diabetes.

A second line of research showed that a small stretch of RNA called MiR-33 can regulate levels of high-density lipoproteins, or HDL, so-called “good cholesterol.” The discoveries are exhilarating, but it’s the prospect of helping patients that truly keeps Dr. Moore motivated. “It gives me inspiration that my work is meaningful,” she says.

Dr. Moore and her lab persevered after flooding from Hurricane Sandy in 2012 wiped out years of research. “We really banded together as a group and came up with a plan of how we were going to rebuild,” she says. “It was a big challenge, but it also was an incredible team-building experience in which everyone in the lab was very invested in making this work and achieving success again.”

Cholesterol crystals (dyed green in image at left) that accumulate in fatty plaques within arteries can cause chronic inflammation and promote atherosclerosis. In a 2013 paper in *Nature Immunology*, Dr. Moore and colleagues identified a protein called CD36 as a key regulator of this inflammatory response. Knocking out its function in mice led to far fewer cholesterol crystals (right).