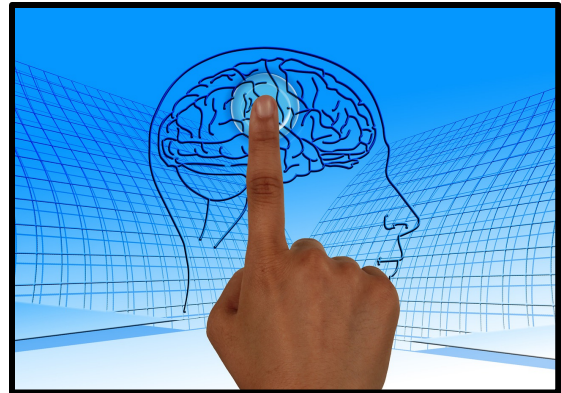


## Blood Samples Illuminate a Window into the Brain

Tucson-Based MSDx is a company that is developing inexpensive, reliable blood tests for monitoring neurodegeneration in brain diseases. These products may provide neurologists with critical data that can be useful in diagnosis, monitoring, and assessing how patients respond to therapeutics for brain diseases such as MS and Parkinson's. The tests could make it possible to obtain important patient information well before a person begins to experience symptoms. In turn, this can help doctors monitor and assess a patient's condition throughout his or her lifetime.



Co-founder Marie Wesselhopf is a bundle of positive energy, a problem solver, a life-long innovator. Before MSDx, she ran the University of Arizona's business incubator. In an example of one innovator attracting another, Marie found her way to Accelerated Cure Project five years ago, when MSDx needed blood samples from people with MS to develop a new blood testing tool. The tip came from a local patient with MS and from a suggestion of Dr. Timothy Volmer, one of ACP's most active and enthusiastic collaborators, who knew about ACP's Repository of biosamples.

Marie describes what happened next. "At the time, we needed fresh cells from newly diagnosed people with a very specific treatment history. We signed an agreement with ACP and soon afterwards, samples that met our specifications were shipped to MSDx for testing. An MS patient would visit one of ACP's cooperating clinics around the country where their blood would be drawn. Then ACP would send some tubes to the Repository for storage, and send a tube to MSDx. We received samples on over 200 MS and other disease subjects. We never could have accomplished this on our own! We couldn't have built the infrastructure necessary to recruit, consent, draw, and process the samples. Without ACP's Repository, it would have cost us \$500 to \$2,000 per sample and taken years to get this number of samples!

"Getting the samples quickly and cost effectively was key to the development of our patented, WINDOW INTO THE BRAIN™." This test is like a brain biopsy that's non-invasive. It offers a real-time view of pathological processes and disease activity in the brain by utilizing molecules and cells that participate in the mechanism of the disease, as biomarkers for diagnosing the disease. These cells contain important clues about the disease activity taking place in the brain. The MSDx technology measures this biomarker cargo within the peripheral blood PBMCs. MSDx expects that continuing and future research will validate this marker approach for research and clinical use."

ACP is proud to have played a role in accelerating the development of new diagnostics to extend patient's lives, and lead to a cure.