

Efficient Lab-to-Field Transition

Researcher Migrates New Animal Tests to Mobile Setting with Miriad

The Challenge

Dr. Joaquín Patarroyo, professor at Brazil's Universidade Federal de Viçosa and a Product Development and Intellectual Property Advisor for Patsos Biotecnologia, urgently needed to transition his successful laboratory work into a real-time, mobile testing environment. The health of animal herds, and ultimately the food supply, depended on it. Dr. Patarroyo, whose research focus is veterinary medicine, had developed antigenic proteins for use in new tests to diagnose three diseases in large animal populations. In the lab, these tests were proven to capture the disease-specific antibodies associated with the diseases. However, Dr. Patarroyo recognized his discovery must evolve outside of the laboratory to be effective. Testing for disease among large animals is most valuable when performed in close proximity to the herd. Veterinarians need real-time information to take immediate action to protect the animals and food supply. For example, without instant diagnostic results, veterinarians lack critical information to determine if an animal should be returned to the herd or quarantined pending treatment. Dr. Patarroyo required a rapid diagnostic technology to mobilize his developments and bring his new tests into the field.

The Solution

Dr. Patarroyo's search for a solution led him to MedMira's Miriad Rapid Vertical Flow Assay Toolkit. Employing MedMira's Rapid Vertical Flow technology, the Toolkit contains components to create a rapid test. The researcher need only provide the capture antigen of interest and the specimen containing the antibody. Within two days of receiving the kit, Dr. Patarroyo produced rapid prototype tests as effective as his laboratory-based enzyme-linked immunosorbent assays and dot blots. With the kit and technical consultation from MedMira, Dr. Patarroyo quickly developed the real-time tests he required, with no need to procure components from multiple sources.

The Results

The Miriad Rapid Vertical Flow Assay Toolkit provided a simple migration route for Dr. Patarroyo's laboratory developments to move to a testing platform more applicable and valuable to animal diagnosis in the field. As a Miriad licensee, Dr. Patarroyo is fully protected by patents encompassing the kit's test system. He is free to develop, market and sell tests he creates with Miriad without infringing on alternative testing technology patents. Having secured funding to further develop his diagnostic tests, Dr. Patarroyo sees a clear pathway to commercialize his discoveries.

"I required an all-in-one solution for research use with technical support to overcome development roadblocks. I also sought follow-on support to assist with future commercialization. MedMira's Miriad Rapid Vertical Flow Assay Toolkit provided the answer."

— Dr. Joaquín Patarroyo

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About MedMira Inc.

MedMira uses its patented diagnostic platform to create advanced Rapid Vertical Flow tests that deliver instant, simultaneous results for multiple diseases. Our products help care providers and their patients know more, instantly. MedMira rapid tests are manufactured in a cGMP facility with a quality management system registered to ISO 9001:2008 and ISO 13485:2003. Learn more at medmira.com.