

Test a tick, get answers: Tulane student-founded startup develops rapid Lyme test

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A home test being developed by Tulane senior Dylan Murray and her company Exactics will allow anyone to determine within 15 minutes if a tick found on a person or an animal carries the Lyme disease pathogen.

"This technology is going to be life-changing," Murray said. The foundational technology behind the test can also be used to detect other infectious diseases.

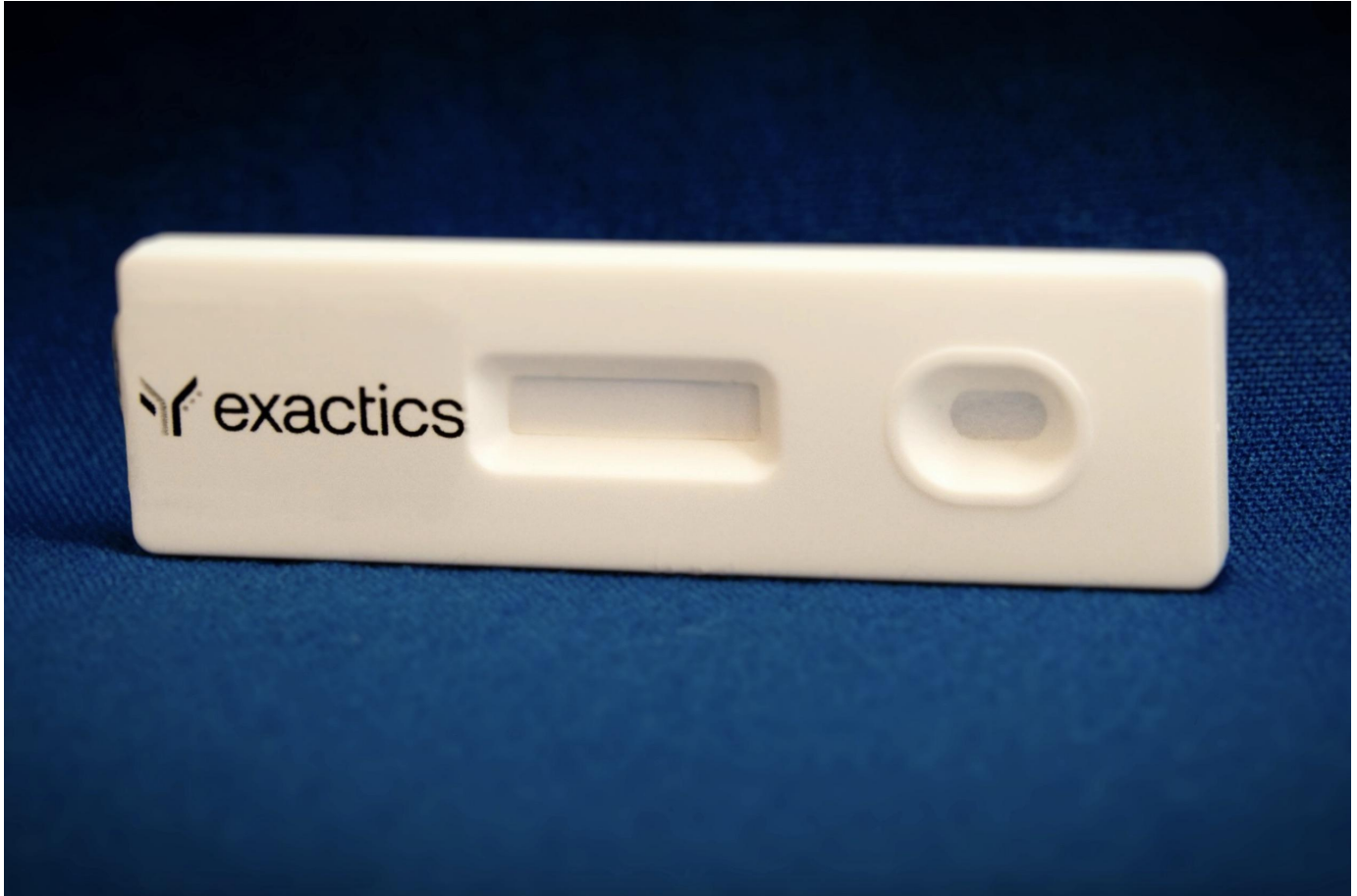
The TICK test is similar to at-home Covid-19 tests, but rather than testing human saliva, it tests the tick itself. In the simple process, when a person, or an animal, gets bitten by a tick, the user removes the tick, mixes it with a solution, and places the solution on the test. The test determines whether the tick has transmitted Lyme disease in the past 24 hours, allowing the user to go to the doctor or the vet and start treatment before symptoms start showing. Earlier detection and treatment of Lyme disease can lead to better outcomes.

Murray tapped into Tulane's innovation ecosystem to jump-start the company with her co-founders. In October 2024, she entered the Tulane Innovation Institute's Open Medical Innovation Challenge (OPEN MIC) Night and the Albert Lepage Center for Entrepreneurship and Innovation Pitch Friday Competition, earning \$2,500 in prize money. By spring 2025, Murray advanced in the Pitch Friday Series Grand Prize Round and the Tulane Business Model Competition, securing a combined \$45,000.

"What's awesome about Tulane students and Dylan in particular is that they're curious. And when curiosity meets a program at Tulane, it can really turn into something pretty special," said Kimberly Gramm, David and Marion Mussafer Chief Innovation & Entrepreneurship Officer at the Innovation Institute.

Murray also connected with Monica Embers, an internationally renowned Lyme disease researcher at Tulane, who is helping validate the tests at the Tulane National Biomedical Research Center.

Tulane Ventures, an early-stage investment fund launched by the Tulane University Innovation Institute, has also invested \$250,000 in Exactics, enabling the company to continue development and bring the test to market. Applications are now being accepted for [Open Season](#), a pitch competition open to Tulane faculty, staff, students and alumni who have bold ideas for startup companies.



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