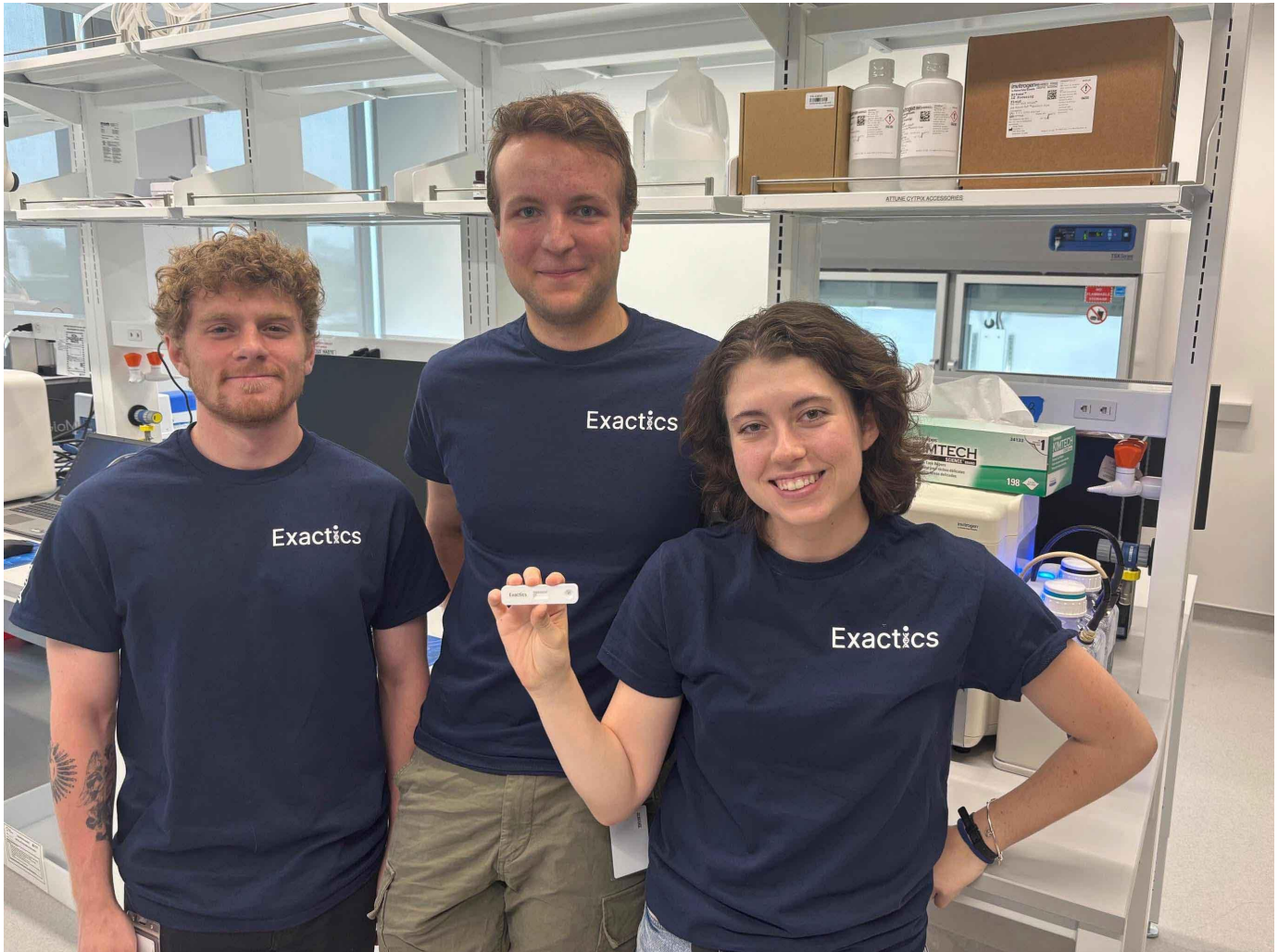


## Tulane Ventures invests in student-led startup to develop rapid Lyme test

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Exactics co-founders Sean Greeby, chief scientific officer; Julian Kage, chief executive officer, and Dylan Murray, chief operating officer, in the lab with a prototype of their new Lyme disease test. (Photo courtesy of Exactics)

[Tulane Ventures](#), an early-stage investment fund launched by the [Tulane University Innovation Institute](#), has invested \$250,000 in [Exactics](#), a biotech startup co-founded by Tulane senior Dylan Murray. The company is developing multiple at-home tests for infectious diseases, starting with a rapid test that will allow users to determine if a tick carries the pathogen that causes Lyme disease.

In a biotech field dominated by seasoned researchers, Exactics is showing that undergraduates can also develop fast, practical solutions to urgent health challenges. The startup was founded by students from the University of Chicago and Tulane. Its flagship product, the TiCK Test, works like an at-home COVID-19 test.

“You take a tick off yourself, your dog or your horse, and put it in our test,” said Murray, Exactics chief operating officer. “In 15 minutes, it tells you whether that tick has transmitted Lyme disease in the last 24 hours — so you know to get treated right away.”

The test is built on Exactics’ patented Proteus+ platform. The modular system can be adapted to test for hundreds of other infectious diseases by swapping biomarkers — a significant advancement in rapid diagnostic technology.

“Dylan’s entrepreneurial spirit is a strong example of the potential we are seeing in student-led innovation across Tulane University,” said Kimberly Gramm, PhD, David and Marion Mussafer Chief Innovation and Entrepreneurship Officer at the Tulane Innovation Institute and managing director of Tulane Ventures. “We hope this investment inspires even more students, faculty and staff across the university to engage with as many entrepreneurial-focused courses and programs as possible within Tulane and throughout the greater New Orleans ecosystem to receive the support to explore and advance their meaningful ideas.”

The idea for TiCK Test began with CEO Julian Kage, who developed the core technology after witnessing a friend get seriously ill from Lyme disease. Kage met Murray during their time as lab partners while freshmen at the University of Chicago. Murray transferred to Tulane during her sophomore year. The duo kept in touch, and Kage invited her to help commercialize the technology and build a company with three additional University of Chicago students, Sean Greeby, chief scientific officer; Max Almeida, chief technology officer; and Zachary Sarmoen, chief financial officer.

Murray tapped Tulane University’s innovation ecosystem to jump-start the company. 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.

She also connected with Monica Embers, PhD, an internationally renowned Lyme

disease researcher at Tulane, who is helping validate the tests at the Tulane National Primate Research Center.

“When we first met Dylan at the Open Medical Innovation Challenge Night, her compelling pitch, sharp focus and innovative solution immediately caught our attention,” Gramm said. “Exactics has quickly gained traction and the potential to scale.”

“It’s really hard starting a company, but it’s a lot easier when you feel like your institution is on your side,” Murray said. “Tulane Ventures’ support gave our startup the credibility we needed to attract additional investors and secure seed funding. Beyond the validation of being an investable company, the process was an incredibly positive experience that taught us how to refine our pitch and navigate the venture landscape.”

Earlier this year, Exactics made history as the first startup team to win both the College and Social New Venture Challenges at the University of Chicago, securing \$250,000 in total prizes.

Exactics has mapped out a strategic market-entry plan for their first product, which will initially target the pet and veterinary markets. A licensing deal with Tick Solutions Global, the inventors of the TiCK MiTT with a vast international distribution network, will support a 2026 launch for the TiCK Test in major pet health and outdoor retailers. Following that, the company will seek regulatory approval to launch its TiCK Test designed for people.

Tulane Ventures, launched in 2023 by the Tulane Innovation Institute, invests in Tulane professors, students, alumni and Louisiana-based entrepreneurs. For more information about the program and funding opportunities, visit <https://www.tulaneventures.com>.

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