

# Labrador Systems: Enabling Independent Living Through a New Kind of Best Friend

Labrador Retrievers are widely recognized as obedient, versatile dogs. Originally bred to aid hunters, this intelligent breed boasts the ability to travel rugged terrain and retrieve wild game, returning prey to its owner undamaged. What could a Labrador Retriever and a robot possibly have in common?

Labrador Systems believes that these admirable characteristics can be used in technology to support people with limited mobility. This early-stage company is focused on creating affordable, high-performance robots to help individuals have more agency in their home environments.

We talked with Labrador Systems vice president of client services, Kerry Huffman, and Mary Auge, senior manager of research development and technology transfer at University of Michigan–Flint (UM-Flint) about Labrador System’s mission and how they are working together to help more people live independently.

## What was the motivation for creating Labrador Systems?

*Kerry:* Kerry: Labrador Systems was founded by Mike Dooley and Nikolai Romanov, two robotics experts who were integral in the development of well-known consumer products like LEGO Mindstorms and the iRobot Braava. The idea for Labrador Systems was spurred when Mike’s mother began to lose mobility as she aged. She was a school teacher for 30 years and had six children, so she spent a lot of her life on her feet. His father is also in his 90s, and they both still live at home. Mike wanted to use his robotics expertise to help his parents—and others throughout the world with limited mobility—in maintaining independence. And that’s how Labrador Systems was born.

## Tell me more about the technology. How does it work?

*Kerry:* Labrador is a robot that assists individuals in completing daily tasks by following commands and traveling autonomously through a house to assist with specific tasks. The robot has two levels that can raise and lower to an individual’s height—a helpful feature that accommodates mobility issues like bending—not just walking. Labrador can also help individuals remember to perform things they may forget, like taking their blood pressure or medications, by automatically delivering objects to their location.

Our pilot studies have shown that Labrador helps increase an individual’s activity levels by enabling them to perform tasks that were previously unachievable, like stripping sheets, putting away groceries, or cleaning the house. Additionally, this technology can be used to collect data on how an individual is taking care of themselves. If an individual opts in to this data collection, caregivers can use it to stay informed of their daily behaviors.

## Who are your customers?

*Kerry:* We are still in the pilot stage and analyzing use cases for Labrador, such as people aging in place or with diseases like multiple sclerosis or Parkinson’s. A study we performed revealed that a large number of people who are experiencing mobility and pain issues are between the ages of 45 and 64, and are oftentimes suffering in silence while also caring for an aging loved one.

Our plan is to first sell directly to consumers at an affordable price point. Once we collect more data, there may be opportunities to pursue insurance reimbursement and use in healthcare facilities.

# labrador™

## Fast Facts

**Founded:** 2017

**Headquarters:** Calabasas, California

**Company Stage:** Pilot phase

**Mission:** Helping individuals with chronic pain or mobility issues to reclaim and retain their independence

**Website:** [labradorsystems.com](http://labradorsystems.com)



### How did you connect with UM-Flint at the MedHealth Mixer?

*Kerry:* My role at Labrador Systems is to assess partnership opportunities that will advance our technology development. I found MedHealth online and it was evident that your initiative understood the fusion of technology and healthcare.

The MedHealth Mixer was composed of panels with well-respected speakers in healthcare innovation and provided ample opportunities for networking. I perused attendee profiles and booked a virtual meeting with Mary [Auge] to discuss partnership opportunities.

### How are Labrador Systems and UM-Flint partnering?

*Kerry:* We are going to conduct a research study with aging adults to better understand what they hope to get out of using a Labrador. UM-Flint has a deep understanding of both occupational therapy and technology development, which makes them the perfect partner for this work.

*Mary:* We had sincere interest in Labrador Systems' mission, and the project scope was an appropriate fit for our research capabilities. UM-Flint was also able to bring in a third party that will provide a housing component to this research study.

### What types of companies does UM-Flint work with?

*Mary:* Our niche is small- to medium-sized companies that are looking to pursue projects that may be too small for larger universities. We have found there is an appetite for these types of collaborations from both industry leaders and our faculty and students. These partnerships allow students to apply the theoretical knowledge that they gain in a classroom to real-world scenarios. Our partnership opportunities are currently strongest in environmental and physical sciences, information and computer science, and health assessment, patient care, and clinical validation.

### What advice would you give to other startup companies?

*Kerry:* When pursuing opportunities, get to the answer "no" as quickly as possible. No one likes being told no, but it will prevent you from wasting valuable resources.

*Mary:* Talk to anyone that could be remotely impacted by your technology. You may uncover information that will expand the applications of your solution or prevent potential road blocks on your path to commercialization.

