When the Human Tissue Resource Center (HTRC) launched in 2001, its name was sufficiently descriptive: the initial operation processed a modest inventory of human tissue samples to enable research objectives inside the University of Chicago's Department of Pathology.

In the ensuing decades, as those research objectives grew to encompass the whole university, the HTRC expanded its mission. Today, this CAP-accredited core facility procures, processes, disperses, and assesses not only human tissue but also DNA, PBMC, saliva, and other body fluids. Investigators from diverse university departments rely on its services to pursue cancer research, to improve understanding of complex neurological disorders like epilepsy and Parkinson's, and to explore potentially life-saving hypotheses related to other critical illnesses. Today, the HTRC has 23 freezers, 18 employees, and a roster of over 370 unique IRB-approved scientific protocols.

It's an extraordinary operation that has outgrown not just the name above its door, but the software under its hood, too.

THE CHALLENGE

The HTRC began by using Microsoft® Excel® to track its biospecimens. It wasn't long before staff realized Excel's limitations as a biobank database, prompting them to migrate onto a homegrown solution. By 2015, that solution could no longer support their rapidly expanding workflows. The search for a more robust solution began, eventually leading them to LabVantage LIMS 7.1, a laboratory information management system. For the first time, HTRC staff could accelerate their request-and-fulfillment tramline using a centralized LIMS—an enormous upgrade for the flourishing facility. But that was five years ago.

"In software terms, five years might as well be a century," says the HTRC’s Technical Director, Mary Jo Fekete. "LabVantage would release a bigger, better, faster LIMS every year, but it was never within our reach. Even our simplest IT issues were unresolveable, let alone a system-wide upgrade."

The reason for Mary Jo’s frustration was a hardworking but inadequately staffed IT support team. The HTRC was one of twenty core university facilities sharing a single IT resource to keep its systems functioning. The IT staffer worked long hours, but he could offer the HTRC only a fraction of his threadbare attention, hardly enough to keep up with routine maintenance... let alone mobilize for a badly needed system upgrade.

Something had to be done. And then, in early 2019, Mary Jo discovered a solution to the HTRC’s growing pains. Something was done—something that changed everything.

THE SOLUTION

The HTRC partnered with LabVantage Managed Services in May of 2019. Even before the contract was signed, Mary Jo and the LabVantage team established an action plan which converged on a mighty promise: after five years of making do, the HTRC would have a specially configured, validated, and fully installed instance of the latest LabVantage LIMS in just six months. And because its Managed Services contract included ongoing monitoring and proactive system optimization, the HTRC would never feel the pinch of an aging infrastructure again.
“At the end of the day, our usefulness to investigators is in our flexibility. We need to go wherever the science goes. And now we have a LIMS that can take us there.”

— Mary Jo Fekete

How Managed Services Implemented LabVantage 8.4
Mary Jo and her team are responsible not only for processing parent/child specimens according to linked protocols, but also for maintaining patient consent records and complex chains of custody. Migrating all of this information from the old system to the new would be a delicate and business-critical process. Everyone wanted speed, but even more than that, they wanted precision. Here’s how LabVantage worked with the HTRC to get both.

- May 2019: Mary Jo’s team signs a contract with LabVantage Managed Services
- June and July 2019: Configuring and validating LabVantage LIMS 8.4
- August 2019: Testing and user feedback
- September and October 2019: Bug fixes and system optimization
- November 2019: LabVantage LIMS 8.4 goes live at the HTRC

Now that it’s live, users love the upgraded LIMS. The Managed Services team configured it to suit the specific needs of both HTRC staff and the investigators who rely on them. It’s especially well-suited for collecting and tracking biospecimen banking data such as patient information, diagnosis, organ site, and linked pathology reports, all within an intuitive interface designed for a scalable production environment.

“At the end of the day, our usefulness to investigators is in our flexibility,” says Mary Jo. “We need to go wherever the science goes. And now we have a LIMS that can take us there.”

How Managed Services Ensures Ongoing and Optimized Data Flow
Now that they’re up and running on the latest software, Mary Jo and her team rely on LabVantage Managed Services to ensure they’re always getting the most from their LIMS. Their one internal IT resource could finally take a break, thanks to the LabVantage solutions engineer dedicated to the HTRC account.

LabVantage provides ongoing and proactive administration of the HTRC’s LIMS, and it supports Mary Jo and her team by answering their questions and tweaking the system to better suit their needs. Because LabVantage has global offices, the solutions engineer assigned to HTRC works in an opposing time zone, which means Mary Jo can submit a question at the end of her workday and find it resolved by the time she’s back at her desk the next morning.

“We need to let go of that old stigma about offshore tech support,” says Mary Jo. “I’m impressed with the responsiveness of our solutions engineer, and his ability to problem-solve for us. He really understands our system and cares about our experience with it.”

THE TRIPLE-ACTION PAIN RELIEF OF MANAGED SERVICES
Once the HTRC team contracted LabVantage Managed Services, their lives immediately improved in three significant ways.

1. **No more aging software.** The Managed Services team configured, validated, and launched LabVantage LIMS 8.4 within six months.

2. **No more "pinch points."** The HTRC’s request tramline is better supported on the updated software, resolving chronic frustrations and enabling faster research outcomes.

3. **No more making do.** A dedicated LabVantage solutions engineer makes the most of his opposing time zone to proactively improve the HTRC’s LIMS while Chicago sleeps. “It’s like magic,” says Mary Jo.

“I didn’t know what to expect of Managed Services going into this, and I was pleasantly surprised,” says Mary Jo of the implementation experience. “I always knew where this project was, where it was heading, and when it was going to get there. In the end the job was done right, on time, by a staff of experts.”
**ADVICE TO OTHERS**

“Don’t hesitate,” says Mary Jo, when asked what she’d tell someone experiencing the pain she felt in early 2019, when the HTRC had outgrown its internal IT resources and was looking for relief. She knows that the decision can be difficult, particularly when it requires persuading administrators that the upfront cost of a Managed Services contract will pay off.

“Some people assume that hiring internal IT resources is cheaper, but by the time you factor in recruitment costs, salaries, training, employee benefits, etcetera, you’re looking at far more investment than what you pay for Managed Services. And what could be better than expert support from the people who built your software in the first place? It’s been an amazing experience for us and it will be for you, too.”

**ABOUT LABVANTAGE MANAGED SERVICES**

LabVantage Managed Services provides full lifecycle application management services for business-critical LIMS solutions. The service takes ownership of monitoring, managing, and optimizing LabVantage LIMS, providing savings through clarity for our customers.

**TO LEARN MORE** about LabVantage Managed Services visit [https://www.labvantage.com/ms](https://www.labvantage.com/ms)