Automation – an extension of the analyst

Reputation and accreditation are essential for clinical reference laboratories, helping to win new business and ensure a steady flow of work from existing customer labs. With diagnostic testing demands increasing year-on-year, Carpermor continually invests in cutting-edge assays and state-of-the-art laboratory automation to maintain the quality and efficiency of its services.



Carpermor's Elena Alcántara and Mario Garcia

Carpermor is an international reference laboratory in Mexico City, offering a full range of routine and specialist clinical diagnostic services to healthcare providers across Mexico, all diagnostic disciplines, and quality is the most important aspect of our work; we are accredited by both the College of American Pathologists (CAP) and our national accreditation authority, Entidad Mexicana de Acreditación."

Mario continued: "With such a large workload and just 185 staff, laboratory automation is now crucial to ensure that we maintain the level of service our customers expect, in terms of both quality and turnaround times. Previously, we worked entirely manually – with various individual washers, readers, etc. – but the rapidly increasing number and diversity of tests we needed to perform made this

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as well as participating in contract and academic research projects globally. The laboratory prides itself on its exceptional levels of customer satisfaction, using state-of-the-art technology to ensure a fast and efficient service for its 1,500 customer labs. Mario Garcia, General Manager for Carpermor's Laboratory and Analytical Centers, explained their approach: "We strive towards service excellence and exceptional accuracy, providing a high quality, efficient and competitively priced service for both routine and highly specialized testing. We perform over 32 million analyses a year across

unsustainable. Our main requirement for any automated equipment within the lab is that it is extremely reliable, as our throughput means that even a short period of downtime can lead to a significant backlog. We also need equipment that is very versatile, helping us to cope with a constantly changing portfolio of assays. For these reasons, we chose Tecan's Freedom EVOlyzer[®] and Freedom EVO[®] platforms to perform the bulk of our ELISA testing."

"We have worked with Tecan for a number of years, and the quality of these workstations has never been in question. They allow us to process the necessary volume of samples in a reproducible and reliable manner, and we do not have any problems with the accuracy or repeatability of our ELISAs, which has helped with our overall workflow by minimizing the need for repeat testing. As with any technology. there was a learning period where we needed to 'tame' the equipment to our needs, but the Tecan platforms have been excellent since we completed this process. We effectively think of the instruments as working prostheses - an extension of the analyst. The flexibility of the equipment is another advantage, allowing us to perform a wide range of protocols on a single platform, and this has helped us to move away from isotopic analyses for many analytes."

Elena Alcántara, a member of the laboratory team at Carpermor, explained: "Isotopic techniques are both complex and expensive, and so we have been trying to replace all our assays that rely on isotope analysis with either chemiluminescence- or ELISA-based methods. Our relationship with IBL International has been crucial to achieving this, and we have been able to work closely with both the company and its distributor here in Mexico to achieve our goals. Although we are not generally well served by major diagnostics providers in Latin America - they are quite inflexible to our local needs and you have to do a lot of the work yourselves - we have found that this was not the case with IBL International. The company's







Each platform offers the flexibility to run multiple protocols, working as an extension of the analyst



Carperpor's workflow relies on Freedom EVOlyzer and Freedom EVO platforms to automate ELISA testing

attitude is very refreshing; we have always found them to be very flexible to our requirements, and we get an answer to any queries we have within 24 hours. They are certainly in tune with our needs."

"The IBL assay kits themselves are also very good. They are all fully validated, which is obviously important in an accredited lab, and the convenience of the infectious disease assays has helped us to resolve a bottleneck in our workflow. The expiry characteristics of the assay reagents are another important consideration, particularly for low volume tests that we do not perform regularly. The IBL kits are very stable, with long expiry dates, which simplifies logistics and ensures we can meet our turnaround time targets, even for tests that we rarely perform. Overall, we are very happy with both the IBL ELISA

kits and the performance of our Tecan platforms. Our ELISA portfolio is still growing, and we will soon need another Freedom EVOlyzer, so we hope to continue with Tecan and IBL assays for many years to come," Elena concluded.

To find out more about the IBL range of diagnostic assays, visit www.tecan.com/immunoassays

To find out more about Tecan's diagnostic automation portfolio, visit diagnostics.tecan.com

To learn more about Carpermor's services, go to www.carpermor.com.mx