



# **Jewish General Hospital** *Montreal, Canada*

*Dr MacNamara, Chief of Diagnostic Medicine*



**cobas**<sup>®</sup>  
*Life needs answers*

*When the Jewish General Hospital in Montreal decided to switch their **MODULAR ANALYTICS** to the cobas® 8000 modular analyzer series to power the delivery of their diagnostic services, the laboratory realized the system's true potential through a stepwise learning process. However, the biggest acceleration in performance came with a novel workflow solution, which uses the primary tubes for the majority of tests and aliquots only for high sensitivity tests. Time-consuming procedures for preparing aliquots and retrieving tubes for add-on tests were swept away by this new workflow process that not only relieved key staff of the monotony of certain daily tasks but also reduced manual errors. It also resulted in significant cost savings on consumables while maintaining testing quality and optimizing turnaround-time.*

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## **Jewish General Hospital, Montreal, Canada**

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- A McGill University Teaching Hospital
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- 23,000 patient admissions
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- Over 6 million tests per year



# Staying true to core values while delivering cutting-edge diagnostics

The Jewish General Hospital was founded in 1934 to serve the new immigrant community that had fled repression in Europe. It is this background that explains the desire to continually 'prove' itself as a leading clinical institution, while still fostering a strong community spirit. This drive to build a reputation for excellence is felt throughout the hospital - and nowhere more so than in the diagnostics laboratory.

Dr Elizabeth MacNamara, Chief of Diagnostic Medicine, has been instrumental in driving through change since she arrived in 1998. She captures the prevailing sentiment of everyone who works at the hospital:

*"It has always been a hospital fighting to be the best, wanting to be the most efficient yet delivering the highest quality. Because it started off under difficult conditions, it's always been a tremendously hard-working, battling hospital and we are proud of that."*



The laboratories under her personal care typify this approach and the perfect example of this can be seen in the way her team has maximized the potential of the **cobas**<sup>®</sup> 8000 modular analyzer series far beyond what many other laboratories have achieved.

## Primary tubes – the magic ingredient in workflow optimization

When the laboratory first installed the new system, it took a while to realize its full potential, but the turning point came with the adoption of a mix of primary and aliquot tube workflow. The rapid throughput and clot detection feature of the **cobas**<sup>®</sup> 8000 modular analyzer series, combined with the **cobas IT** middleware, allows the implementation of a workflow which uses the primary tubes for testing. Before this, the person working on the **MODULAR PRE-ANALYTICS** (MPA) system would spend several hours a day just loading cups and pipettes, and the waste in both time and consumables was tangible.





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Previously, when using aliquot tubes for all the tests, the primary tubes were sent to the storage unit immediately after the aliquots were done. If add-on tests were requested during the day, they were often held over to the end of the day because the primary tubes had to be retrieved from the archive unit. Before the implementation of this workflow, about 150 tubes a day had to be retrieved from the archive for this purpose, but now it is down to as few as ten. Add-on tests are now performed earlier with fewer resources needed to process the tubes.

## How it works

The **cobas IT** middleware workflow management controls sample routing and facilitates recursive workflow. After a first run on the analyzers, the primary tubes are reintroduced to the MPA and if add-on or repeat tests are needed, the tube is immediately directed to the appropriate analyzers. If no additional tests are requested, the primary tube is sorted to the archive racks.

Before implementing the new workflow solution, the analysis made to measure the impact on turnaround time showed no significant changes to routine and STAT tests. Following the implementation of the new workflow solution, the staff that used to be responsible for the aliquoting were able to be redeployed to more valuable tasks.

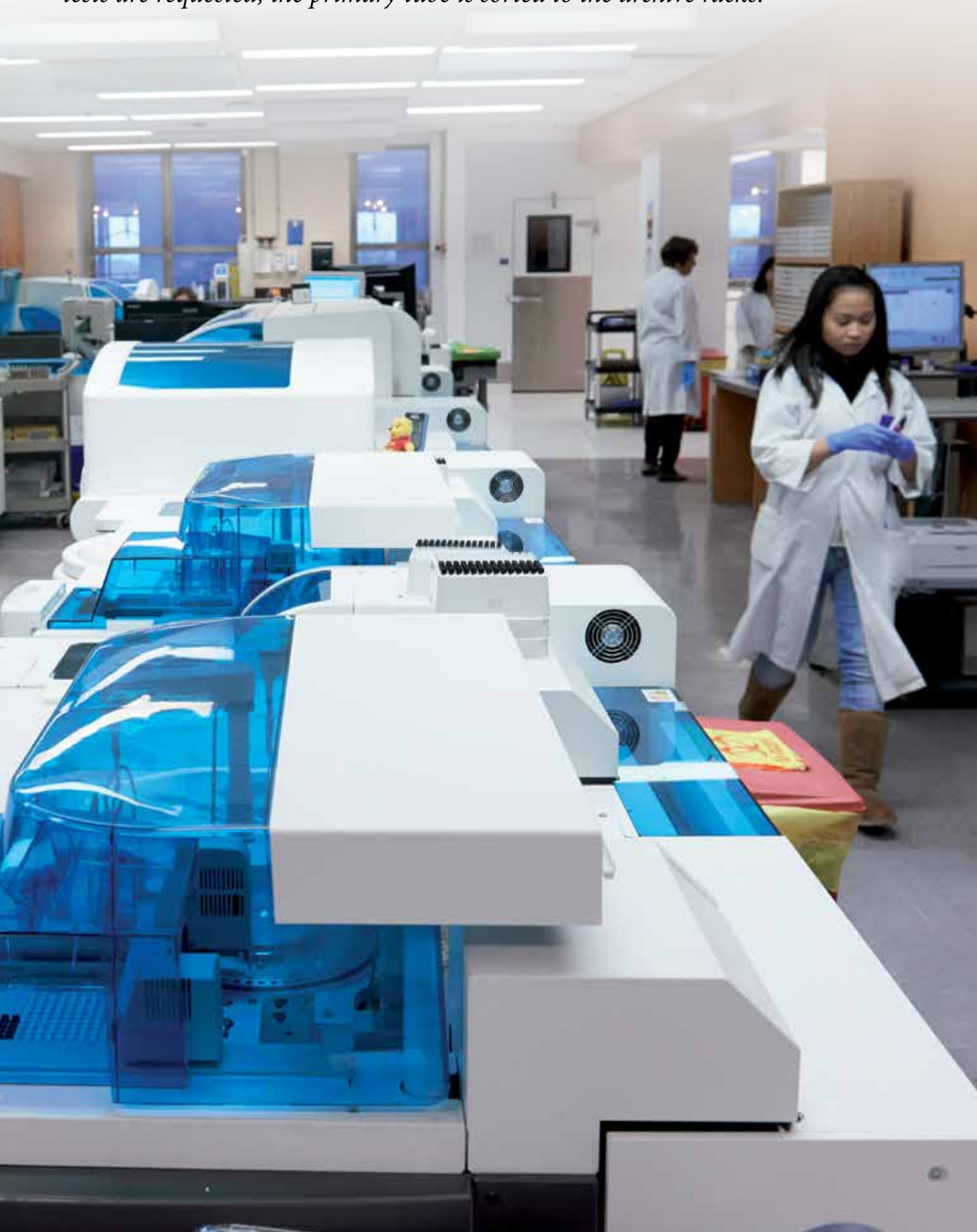
Antoinette, one of the laboratory technicians, has witnessed the benefits of the new procedures:

*“Once we moved to the mix of primary and aliquot tube workflow, everything changed. We used to have a person on the MPA who would spend about 4 hours a day just loading cups, pipettes and physically walking up and down the laboratory. So by moving to a mix of primary and aliquot tube workflow, we have solved let’s say about 70% of the problems we had.”*



Another important impact of this workflow is that less blood from patients is necessary for doing the same number of tests. “It’s also nice to know that what benefits us benefits the patients too, because errors are reduced and repeat blood sampling is virtually non-existent.”

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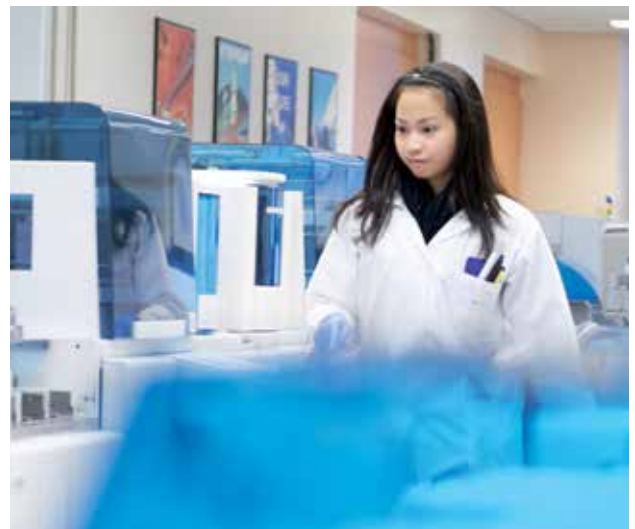


# Two machines, one standard



The laboratory installed two **cobas**<sup>®</sup> 8000 systems when they made the switch and in such a situation, it's clearly important to ensure that the results from each machine are comparable with the other. In Dr MacNamara's experience, conducting a comparative validation could be a time-consuming and complex process, but the **cobas**<sup>®</sup> 8000 software enabled her team to run a full comparison of the two machines and extract all the data in half a day.

*“Not only are comparative runs easy to perform, but every time we've done them, we've been amazed by the results. We find it hard to believe that the difference between the two machines is so miniscule – you can't even tell that it is two different machines.”*







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# Forging a close relationship with Roche – how to get the most out of the technology

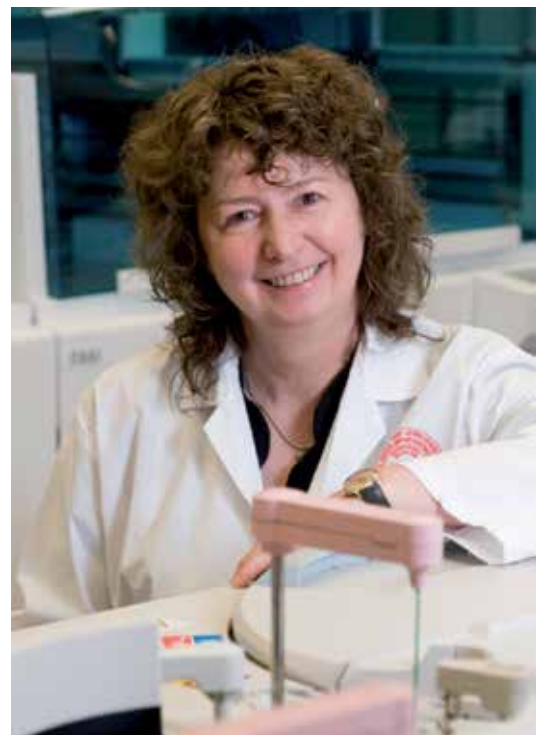


There are many examples of technology being stretched by end users who are determined to reveal its full potential, and the way that the Jewish General Hospital in Montreal has embraced the **cobas**<sup>®</sup> 8000 modular analyzer series and **MODULAR PRE-ANALYTICS** and **cobas IT** middleware is a classic case. It would have been easy for the laboratory to install the new systems then just rely on them to process samples in an efficient and reliable way, but Dr MacNamara and her team were determined to push the technology to its limits in an attempt to improve the whole working ethos and environment.

They have achieved some startling results by doing this and the staff now focus on other aspects of their role, to train for new skills and also to have fun. But Dr MacNamara concedes that her relationship with Roche is very much a two-way street and one that is mutually beneficial to both parties.

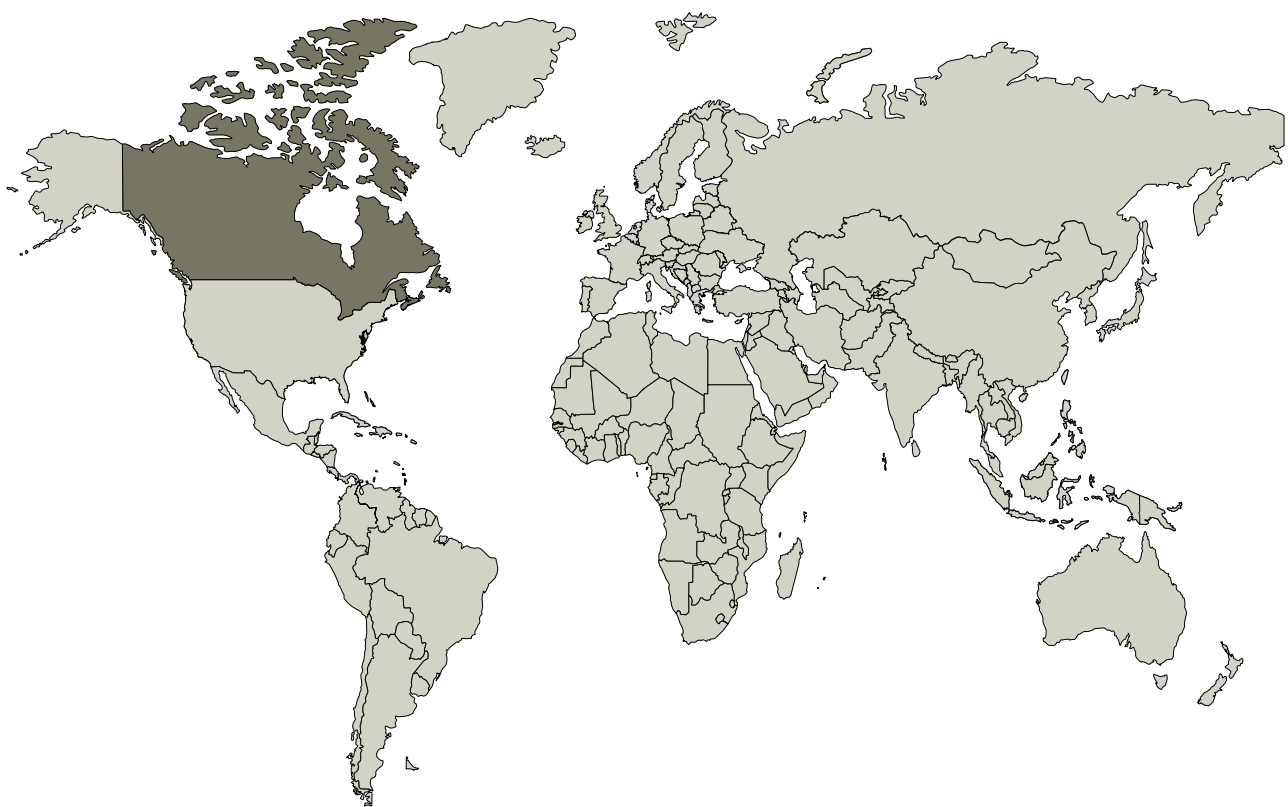
*“We push Roche hard in terms of their support for us, but it’s reassuring to know that we are taken very seriously. When things go wrong – as they can do in any relationship – we know, from experience, that they are strongly motivated to put things right. That aspect is often undervalued in a supplier: how do they fix a problem when it’s identified? It’s always clear to us that Roche puts all the resource needed into finding a solution.”*

So it is hard to predict the future shape of the diagnostic services at the Jewish General Hospital, but one thing is for certain: The Roche solution with **cobas**<sup>®</sup> 8000 modular analyzer series, **MODULAR PRE-ANALYTICS** and **cobas IT** middleware will remain at the cutting edge, providing increasingly detailed analysis and consistently reliable, highly efficient performance. Dr MacNamara and her team would not settle for anything less.



# **Jewish General Hospital**

*Montreal, Canada*



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