

Routinely Providing Cutting-Edge Services to Swedish Researchers

The Science for Life Lab implements Clarity Laboratory Information Management System (LIMS) to cope with increasing sample volume in multiple labs.

The Challenge

Large research labs with diverse clients must balance the demands of using cutting-edge technologies and standardizing processes and workflows to run their labs optimally—all while seamlessly providing a service to customers. The Science for Life Lab (SciLifeLab) is no different. As a collaboration among Stockholm University, University of Uppsala, KTH Royal Institute of Technology, and the Karolinska Institutet, they process approximately 5000 samples per year for researchers throughout Sweden. To continue to provide the utmost in quality and innovative services, SciLifeLab knew that it would have to purchase a LIMS, so they turned to Clarity LIMS^{*} for help.

Finding the Right Solution

Like many other labs, SciLifeLab was successfully using an elaborate system of Google spreadsheets to manage their samples. But they knew that it was only a matter of time before they had to invest in a LIMS: the increasing volume and diversity of samples made filling out the spreadsheets cumbersome, difficult to track, and prone to human error.

They did purchase a LIMS, but it didn't correspond with the way they worked in their lab. They also explored the option of developing their own system, but ultimately decided it would take resources away from what they do best. After looking at quite a few other LIMS vendors, SciLifeLab decided to work with GenoLogics and use Clarity LIMS. According to Per Kraulis, the Manager of Genomics IT, Clarity LIMS offered SciLifeLab the best fit because it was engineered specifically for labs doing next-generation sequencing. That it was flexible, offered preconfigured workflows for common instruments, such as those from Illumina, and could be further customized via the Application Programming Interface (API), was also key in their decision.



The Science for Life Laboratory (SciLifeLab), in Solna, Sweden.

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* Clarity LIMS is now available from Illumina as BaseSpace[®] Clarity LIMS.

Implementing Clarity LIMS

To implement Clarity LIMS, GenoLogics worked closely with SciLifeLab. A large challenge presented itself early when SciLifeLab decided it couldn't halt production to switch from the old LIMS to Clarity LIMS. Kraulis likened this challenge to swapping the wings of an aircraft while it is in flight. Close collaboration between GenoLogics and SciLifeLab turned into a savvy implementation plan, which ultimately helped SciLifeLab mitigate this challenge.

Getting staff to adopt the new system has been straightforward as well. Kraulis remarks that the interface is intuitive, corresponds with the way they work, and that training and support prepared them well.

Enabling Life Sciences Throughout All of Sweden

After a successful implementation, SciLifeLab is using Clarity LIMS almost exclusively and have purchased another instance for use in their clinical genomics lab. Even though they are early on in their use of the system, they already note several benefits:

- **Reduced Possibility of Human Error**—Clarity LIMS populates lot numbers throughout.
- **Comprehensive Sample Tracking**—They can now easily track all their samples.
- **Potential for Further Customization with Other Tools**—SciLifeLab has already set its sights on further integrating Clarity LIMS with third party or in-house tools, such as analysis programs and pipeline dashboards through use of the API.

And most importantly, Clarity LIMS has enabled SciLifeLab to find that balance between providing cutting edge services and standardizing lab processes to continue to provide the best services possible for its customers.

Learn more about BaseSpace Clarity LIMS at www.genologics.com/clarity-lims

Summary

Overview

The Science for Life Lab, a collaboration among several Swedish research institutes, implements Clarity LIMS to meet growing demands in managing lab processes.

Challenge

Processing an increasing volume and diversity of samples demands standardized processes and workflows for optimal lab performance, with data management that is free from human error.

Solution

Clarity LIMS offered preconfigured workflows and integrated data management across experiments and multiple facilities.

Benefits

Reduced possibility of human error, comprehensive sample tracking, and potential for customization with other tools.

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