

Large Academic Health System Implements Automated Platform for Genomic Sequencing

CHALLENGE

L7 confidential customer is a large academic health system that conducts large volumes of Next Generation Sequencing (NGS) experiments. The lab was looking for efficient and comprehensive ways to facilitate operations through acquiring software that excels in laboratory and informatics management at a data-intensive laboratory environment. Evaluation of the Laboratory Information Management System (LIMS) previously used at the lab and its collaborators showed insufficient match to the requirement and suggested that the search needed to be expanded.

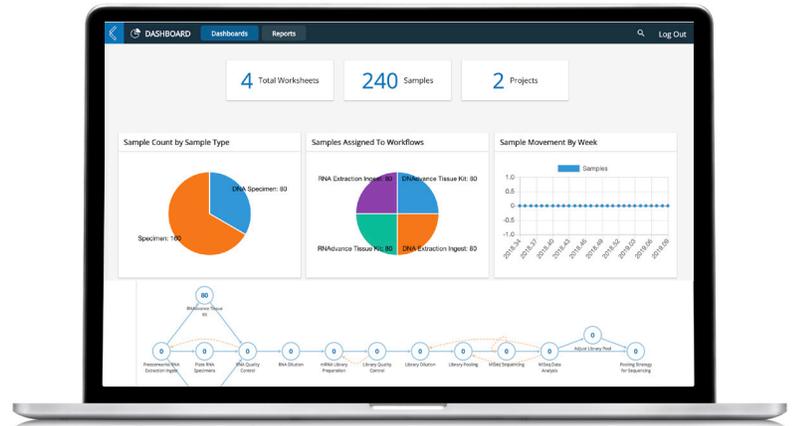
SOLUTION

L7 Informatics (L7) provides solutions for managing informatics infrastructure in data-intensive laboratory environments. L7's core product, Enterprise Science Platform (ESP), includes services for managing all aspects of laboratory operations, from sample tracking and accessioning, through workflow management, and into analysis and reporting.

As a platform, ESP is designed to integrate disparate laboratory systems using ESP's metadata, data provenance, workflow management, and pipelining engines, all of which can be leveraged to integrate and fill gaps in existing systems.

The Project team indicated the following were the reasons for selecting and implementing ESP:

- **Relationship** – L7's customer success ethos and company values were very evident throughout the sales cycle and further validated thru "on-functionality" and "on-budget" project implementation
- **Flexibility** – ESP's ability to handle the complex workflow and data-intensive business process



- **Extensibility** – ESP automates and the lab workflow with integrations to software and instrumentation and ability to automate manual calculations
- **Scalability** – ESP's ability to manage significant growth in forecasted transaction volumes (50,000 – 60,000 over the next few years) without having to invest in more lab techs

RESULTS

The Project program successfully implemented its NGS data management plan using the L7 ESP platform. The production environment currently executes the rna-seq workflow. The methylation workflow is in the final stages of alpha testing and the atac-seq workflow is under development.

“The choice of going with ESP was largely affected by the realization that the team in L7 is highly professional and most importantly, the team understands our business requirements and is keen to help by providing solutions and advice.”

*Project Lead
Confidential Customer*