

GenoLogics Plans Series of LIMS Upgrades to Increase Adoption in Sequencing Market

By Uduak Grace Thomas, GenomeWeb BioInform, May 13, 2011

<http://www.genomeweb.com/informatics/genologics-plans-series-lims-upgrades-increase-adoption-sequencing-market>

GenoLogics this week released a development roadmap outlining proposed enhancements to its laboratory information management system software over the next year.

The roadmap includes the development of new features and capabilities that the company believes are necessary to meet the standardization, flexibility, and user requirements of next-generation sequencing labs. It includes plans for pre-configured GenoLogics LIMS for major sequencing platforms as well as "role-based" user interfaces geared toward specific types of users.

Regarding its plans to offer pre-configured integrations with major NGS platforms, GenoLogics took the first step in this strategy when it inked a co-selling agreement with Illumina in February under which the sequencing giant agreed to market the LIMS (BI 02/04/2011).

This week, the company released a pre-configured version of its LIMS for Illumina's HiSeq and GA IIX sequencers and TruSeq sample prep kits (see this week's downloads and upgrades). The roadmap calls for the launch of similar versions of the system for other platforms in the second half of this year.

Formerly called Geneus LIMS, the system is now called GenoLogics LIMS. The company said it renamed the software to avoid litigation resulting from a trademark challenge, but did not elaborate.

GenoLogics has also released the Rapid Scripting application programming interface, which enables scientific programmers and bioinformaticians to reconfigure or customize workflows as their laboratory protocols change. The company said it plans to increase the API's flexibility and real-time adaptability.

Going forward, GenoLogics said it plans to create role-based user interfaces intended to meet the specific needs of different types of users. The first of these, an interface intended for lab technicians, will be released at the end of the year. Additional interfaces for laboratory managers and external collaborators are also planned, as are CLIA and CAP/ISO capabilities for clinical genomic lab applications.

In a statement, GenoLogics CEO Michael Ball noted that current approaches to data management "fail to meet the needs of high-throughput, next-generation genomics labs" because they do not "recognize that critical research is being performed on alternative platforms across and among organizations."

He said that the enhancements to GenoLogics LIMS will provide a "comprehensive information management system for next-generation genomics labs."

'Brutally Honest' Feedback

In line with the company's LIMS roadmap, GenoLogics has tapped Bruce Pharr as vice president of product management and marketing. In this position, he will be charged with developing and executing the company's next-generation genomics LIMS strategy.

Pharr, who spoke to BioInform via e-mail, said the proposed changes to the LIMS were inspired by customers who "have been generous in their praise of what we do well" while being "brutally honest as to what capabilities we need to enhance."

The company's customers "are working closely with us in the goal-directed design of our APIs and role-based user interfaces," he said, adding that "more and more new customers want the capability to expand our LIMS from research to clinical applications within the next 12 to 18 months."

He noted that role-based user interfaces "were the highest requested LIMS feature in a recent survey of genomic lab personnel."

Additional input has come from partners such as Illumina. Pharr said the sequencing vendor worked "closely" with the company in the development of its pre-configured LIMS for the HiSeq and GA IIx.

The GenoLogics LIMS was already integrated with NGS platforms from Life Technologies, Illumina, and Roche, but the Illumina platforms "are the first where we have pre-configured our system for out-of-the-box implementation," Pharr said.

He added that the company is in the process of evaluating other NGS and third-generation platforms for which to create pre-configured solutions, but noted that the timeline will be based on customer interest in existing and new platforms as well as support from partners.

Pharr said the company will have to contend with three categories of competitors: general-purpose LIMS vendors; genotyping analysis software vendors; and companies that adopt a consulting software development business model and "occupy the low-cost, low-capability portion of the market."

"Our focus on deepening capabilities specifically for the requirements of next-generation genomics labs will continue to widen the gap between the GenoLogics LIMS and general-purpose LIMS," he said.

Meanwhile, he said, "some genotyping analysis vendors have modified their software to provide some LIMS-like functions to augment their specific analysis tools." However, he said, "we are not tied to any specific analysis tool, but rather concentrate on delivering a full-featured LIMS that interfaces with any analysis tool our customers choose."

He added that incorporating features specifically designed for genomics labs into GenoLogics' core products has "cut implementation time[s] by 50 percent or more, compared to consulting software developers."

Other companies offering LIMS for genome sequencing labs include Geospiza, which was recently acquired by PerkinElmer (BI 5/6/2011); Core Informatics; GraphLogic; and the BioTeam.

Pharr said GenoLogics, which is headquartered in Victoria, Canada, with offices in San Francisco and London, plans to keep its current global headcount of 50 employees for the time being.

Pharr explained that as "an early-stage software company," GenoLogics historically "relied on our professional group early in the product life cycle for much of our implementations" in order to allow "greater flexibility with the unique needs of early adopters."

However, as the market matures, GenoLogics is pre-configuring more capabilities into its core products and relying less on services. This, he said, is enabling the company to move personnel from services tasks to more development-type activities.

Once it begins to reap the benefits of this shift — anticipated for the third or fourth quarter of the year — the company will hire additional staff to fill positions in product management and development, pre- and post-sales, and channel management, Pharr said.