### illumina

## Illumina ArrayLab Consulting Service

A comprehensive solution to meet your ultra high-throughput needs



High-throughput laboratory setup Capacity planning

Hardware and data management Illumina ArrayLab Consulting

Lab management, staffing, and resource planning

Data quality, risk management, and troubleshooting

Inventory management

One comprehensive solution covering the full spectrum of high-throughput array studies.

# Scale to ultra high-throughput with confidence

Illumina ArrayLab Consulting Service delivers services and solutions to help genomics centers scale to ultra high-throughput genotyping production. We evaluate and prep every aspect of your operation to help ensure success.

With 15 years of leadership in genotyping and next-generation sequencing (NGS), Illumina ArrayLab Consulting Service will equip your facility with the best practices, planning tools, and customized support you need. We're here to help you achieve the highest level of operational efficiency for your array projects.

Laboratory management

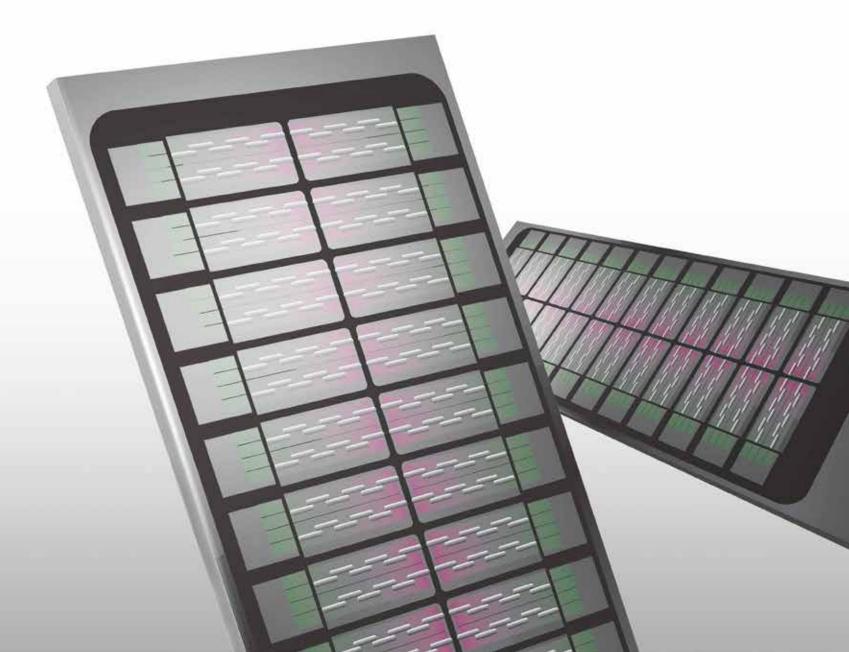
# Ramp up & maintain momentum

Developing a genomics center that produces high-quality data at maximum capacity requires extensive planning. To help guide the process, Illumina ArrayLab Consulting Service provides a complete overview of ultra high-throughput array center management principles and best practices.

We'll evaluate your center's unique needs, while addressing critical operational considerations in each sub-segment of your facility.

We help your center scale and maintain ultra high-throughput performance.

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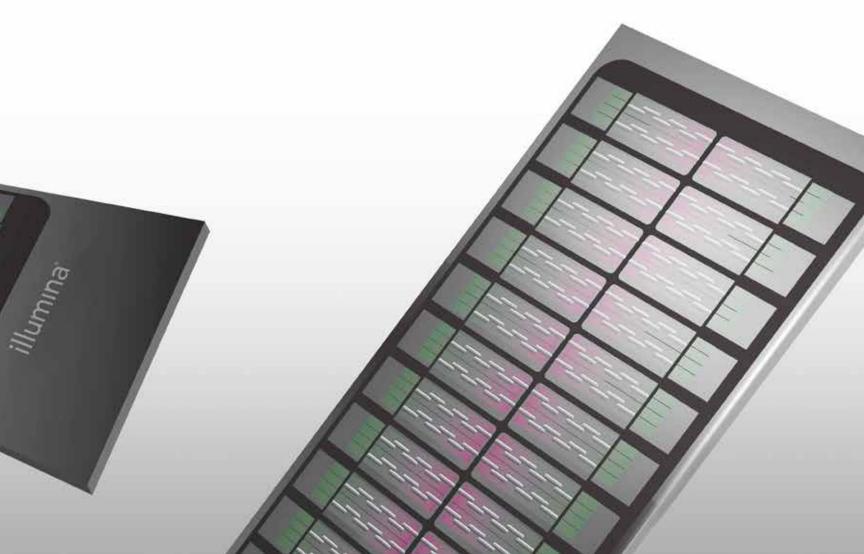


Capacity planning

## Plan to meet your production goals

Through capacity planning, we help you define your business and production model, and conduct a detailed analysis of your processes. We compare capacity with anticipated demands, identify process bottlenecks and their financial impact, and provide weekly process schedules. The goal is to set up your facility to run at the optimal rate to maximize your investment.

We perform a comprehensive analysis to provide you with capacity calculators and a customized plan for your center.

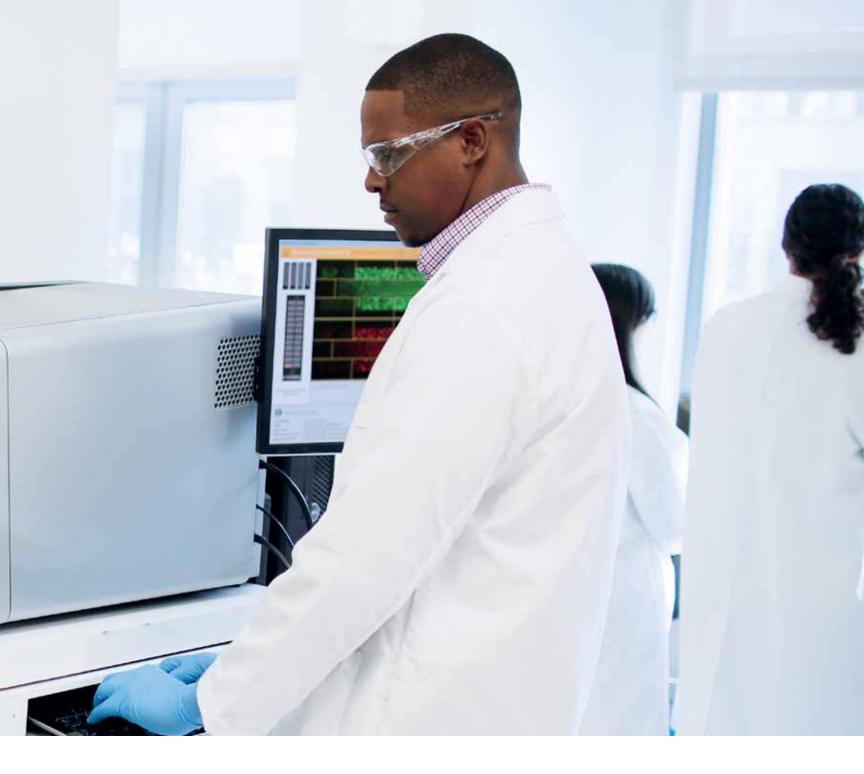




### Staffing and communications

## **Build a team for success**

Another critical component of successful large-scale genomics centers is having the right team in place. Balancing roles and functions of personnel, as well as establishing and maintaining clear lines of communication, are essential. Working closely with your team, we'll help create a staffing plan tailored to your organization.



Together, we'll help build your center with the following:

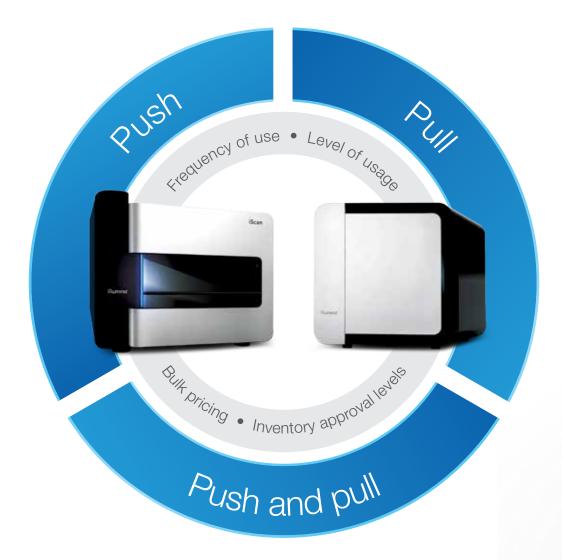
- Templates for monthly system and equipment reviews
- Guidance on cross-training and staffing for capacity
- Staffing models by role and laboratory job description
- Number of shifts, people, and skillsets required
- Organizational charts
- Meeting agendas

# Manage inventory to match performance goals

Illumina ArrayLab Consulting guides you through selection of the inventory management approach that best fits your center: a push system, a *Kanban*-style pull system, or a combination.

We'll work with you to create a customized inventory management plan based on your unique needs.

Our comprehensive assessment lays the foundation for the customized risk management strategy we create for your genomics center. We identify potential points of failure, risks, residual risks, and mitigation plans. Strategies may range from leveraging work in progress (WIP) inventory to recommending simple procedural changes and identifying system redundancies—all to help minimize the interruption of critical functions.



#### Evaluating inventory management system requirements.

Data quality, risk management, and troubleshooting

# Identify & reduce risk to minimize interruptions

With regular performance trending in ultra high-throughput genotyping, we enable rapid troubleshooting to reduce costly interruptions. We help identify key performance indicators and develop a customized plan to help increase and maintain productivity.

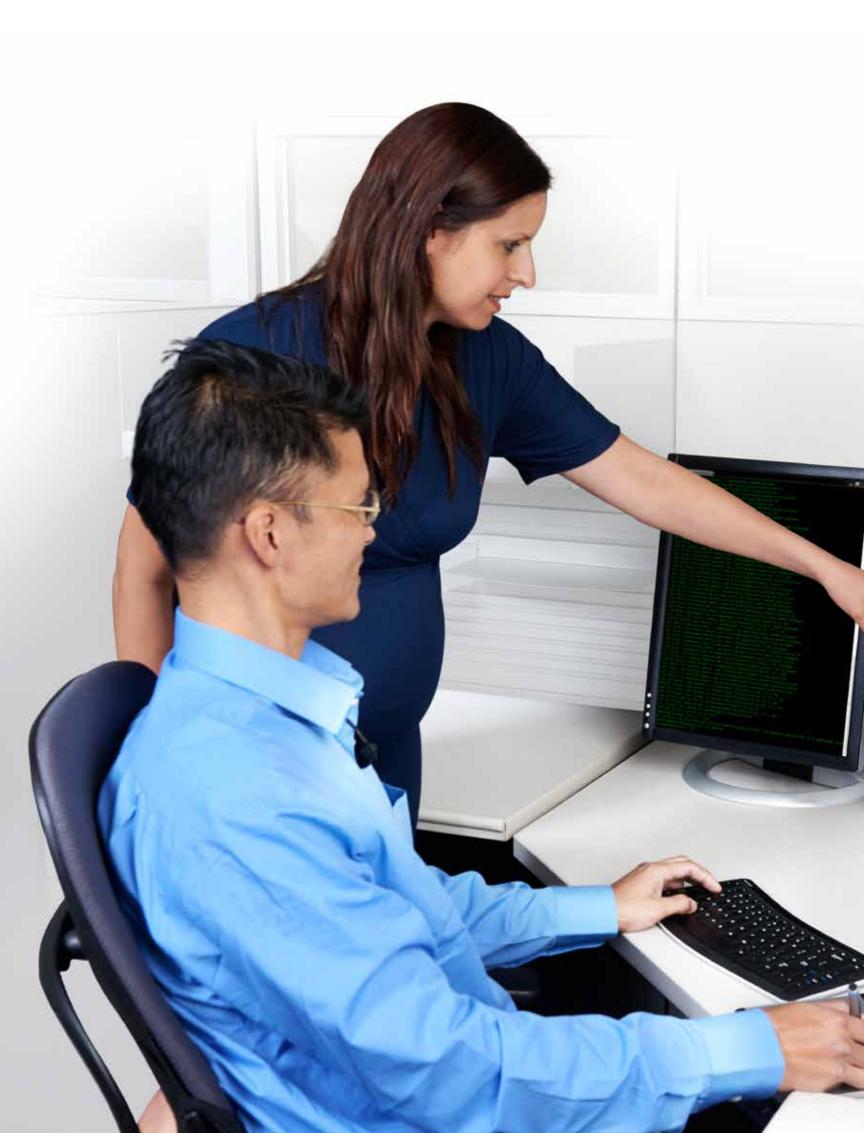
When an unsuccessful run takes place, its impact is obvious. Less obvious and equally important is the slow degradation of performance over time that can adversely affect production and the bottom line. That's where Illumina ArrayLab Consulting comes in, with the guidance and tools to help you monitor and manage ongoing performance over time so you can achieve ultra high capacity...and value.

Employ effective steps to trend at scale:

- Select a set of quality metrics
- Monitor these metrics
- Set up a plan manual or automated to assess and report trends

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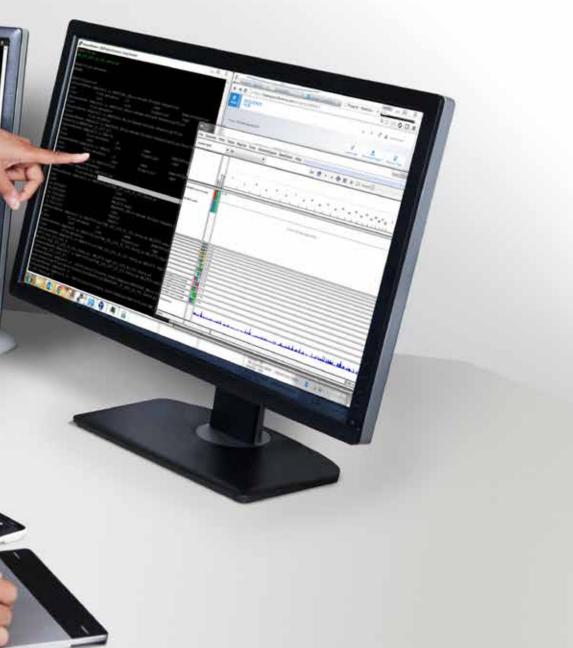




# Configure your genomic infrastructure to scale

Illumina ArrayLab Consulting encompasses a detailed evaluation of your IT infrastructure to plan the optimum configuration specifically for your center. We consider your data analysis and management needs, as well as your specific business model.

We help you implement data management strategies covering your center's turnaround policy, as well as data retention and deletion practices, sample contamination detection, and genome quality measurement protocols.



### World-class solutions.

### A community of support.

From sample prep, library prep, arrays, and sequencing to informatics, Illumina next-generation solutions empower researchers and clinical researchers across the globe to find the answers they seek.

When you join the Illumina community, you become part of a dynamic scientific movement that includes thousands of researchers and industry thought leaders. Throughout the year, we host user group meetings, symposia, consortia, online forums, and other initiatives—all designed to bring the best minds together to share ideas and advance science.

In addition to on-site training, ongoing support, and phone consults, we offer webinars and courses at various Illumina locations. We're here with all the resources you need to accelerate progress.

Discover how our ArrayLab Consulting Service can help you achieve ultra high-throughput success. Contact your Illumina representative to learn more or visit **www.illumina.com/product-services.** 

A global genomics leader, Illumina delivers comprehensive next-generation sequencing workflow solutions to the basic and translational research communities. Illumina technology is responsible for generating more than 90% of the world's sequencing data.\* Through collaborative innovation, Illumina is fueling groundbreaking advancements in the fields of oncology, reproductive health, genetic disease, microbiology, agriculture, and forensic science.

\*Data calculations on file. Illumina, Inc., 2015.

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