

Case Study: Governmental Research Institute and Ingenuity Variant Analysis

Introduction

This case study of National Institutes of Health is based on a March 2013 survey of Ingenuity Systems customers by TechValidate, a 3rd-party research service.



“The biggest advantage of Ingenuity compared to other tools is that it is very user-friendly and very fast. I have bioinformatics skills, but it is very easy and convenient to use and share with colleagues who have none. Also, I love the fact that pathways and biological knowledge from genes and diseases are integrated in this tool.”

Challenges

- Solved the following challenges by deploying Ingenuity Variant Analysis:
 - Realized faster and easier identification of causal variants
 - Improved access to biological content including primary sources
 - Enabled independent study without the need for specialized bioinformatics skills
 - Enabled support for more studies by providing a self-service tool for colleagues and collaborators
- Purchased Ingenuity Variant Analysis for the following reasons:
 - Access rich biological content in Ingenuity Knowledge Base plus additional sources of variant level content
 - Reduce time to identify variants worth following up on
 - Identify high impact, most compelling variants to follow up on

Use Case

- Uses the following applications with Ingenuity Variant Analysis:
 - DNA sequencing – Whole Exome
- Sequencing data is from the following platforms:
 - Illumina Genome Analyzer (GA) / HiSeq

Results

- Chose Ingenuity Systems over the following solutions:
 - ANNOVAR
- Saves > 3 days per sample using Ingenuity Variant Analysis for DNA variant annotation and analysis.
- Reduced time to results by 50 to 74% by using Ingenuity Variant Analysis for DNA variant annotation and analysis.
- Rated the following Ingenuity Variant Analysis capabilities in terms of how differentiated they are compared to other data analysis solutions:
 - Speed: 5 (strongly differentiated)
 - Accessibility/ ease of use: 5 (strongly differentiated)
 - Sharing with colleagues/peers: 5 (strongly differentiated)
- Is extremely satisfied with the ease of use of Ingenuity Variant Analysis.

Organization Profile

Organization:
National Institutes of Health

Organization Size:
Federal

Industry:
Government

About Ingenuity Systems

QIAGEN offers industry-leading applications for the analysis, interpretation, and reporting of biological data.

Understanding raw data is one of the most significant challenges in modern molecular methods. Data must be examined within the context of complex biological processes, and rapidly increasing throughput makes analyses time and labor intensive. QIAGEN's portfolio of powerful tools addresses this bottleneck with innovative applications based on cutting-edge bioinformatics.

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