



# Quantori Overview

**Quantori** Delivers End-to-End Digital and AI-Driven Solutions, Empowering Innovation in the Life Sciences and Healthcare Industries.

With deep domain expertise and end-to-end capabilities in AI, data science, and software engineering, we help biotech, pharmaceutical, and healthcare organizations accelerate research, enhance data-driven decision-making, and improve patient outcomes.

# Quantori at a Glance



## Trusted by Industry Leaders

Partnering with top biotech, pharma, and healthcare companies and institutions worldwide



## Domain Knowledge

Specializing in pharmaceutical, healthcare, and life sciences, with a strong blend of technology and regulatory knowledge



## Proven Digital Expertise in AI & Data Science

Successfully undertaking digital transformation projects, delivering AI-driven solutions, ML, NLP, and advanced analytics



## Agile & Scalable Team

600+ experts worldwide with a flexible, adaptable engagement model, ensuring rapid onboarding and seamless scalability for any project

## Board and Co-founders

### **Richard Golob**

Chief Executive Officer

### **Dr. Yuriy Gankin**

Chief Scientific and Strategy Officer

### **Vitaly Aronov**

Chief Technology Officer

## Senior Executives

### **Dmitri Baranov**

Chief Financial Officer

### **Solman Rahman**

Executive Vice President, Europe

### **Sean Murphy**

Senior Vice President, Client Services

### **Arun Nayar**

Global Head, R&D Informatics

### **David Walker, MSc, MBA**

VP, Life Sciences Business

# Our Core Values



**Our core values are the principles we embody daily, shaping our work, collaborations, and contributions. They form the essence of Quantori's culture and serve as the compass that guides us on our journey, making a positive impact on the industry and the world we operate in.**

## Integrity

Guided by Principles, Driven by Purpose

Integrity is the foundation of trust, fostering strong relationships with our partners, clients, and team members.



## Dignity

Where Respect Meets Progress

We believe everyone should receive dignified and respectful treatment, nurturing an inclusive and supportive work environment.



## Empathy

Building Solutions That Begin with Understanding

Empathy fuels collaboration, enabling us to forge deeper connections and cultivate a workplace characterized by compassion and understanding.



## Accountability

Driving Progress, Delivering Results

Accountability ensures the fulfillment of our commitments, with reflections and learnings from challenges faced and driving continuous improvement.



## Innovation

Innovating Today for a Better Tomorrow

Innovation fuels our growth, enabling us to pioneer solutions that have a significant impact on the life sciences, healthcare, and pharma industries.



# Service Portfolio



## Research and Development

- Integrated informatics, research tool sets
- Data integration and management
- Data warehouses and platforms
- High Performance & Scientific computing
- Scientific data curation
- Translational research
- Cloud-based data analysis pipelines



## Analytics, Big Data & Data Sciences

- Algorithmic & statistical and stochastic modeling
- Clinical & genomics data analysis
- BI and reporting
- Predictive & population analytics
- Data transformation consulting
- Imaging and visualizations
- Precision medicine



## Enterprise IT & Collaboration

- Enterprise platforms for internal & external collaboration
- RPA, workflow automation
- Systems integration, enterprise search
- CMS, CRM, document management, CRO communication
- Cloud deployment and support, DevOps
- Optimization of IT application portfolios



## Digital Product

- Service design and strategic consulting, BA and product development leadership
- Omni-channel solutions for telemedicine, integrated health, care & clinical trial management, patient engagement
- Digital product development and e-commerce platforms



## Lab and Medical Devices

- Digital lab conceptualization and design for next-gen research
- Software for medical devices compliant with industry regulations
- Wearables, sensor data collection, standardization
- Remote monitoring / remote control
- Device design & integration, Connected hospital



## New Technologies

- ML / AI, AR/VR, Blockchain
- Mobile, Connectivity and IoT
- Bioinformatics tools optimization
- Algorithm development
- Open-source accelerators
- Innovation as a service

# Key Expertise Areas



With over two decades serving the Pharmaceutical & Life sciences industry, Quantori services support end-to-end drug discovery, development, and commercialization.



## Laboratory Informatics

Alignment within laboratory informatics brings our clients closer to their patients through improved diagnosis, treatment methods, and drug development.



## Data Science & Engineering

We create the architecture, layout, workflows, and initial data systems to make sure the right data stays current and new data can easily be added or removed.



## AI & Machine Learning

We design and deliver innovative AI and ML solutions to create deep learning models that recognize and predict data patterns with more accuracy and precision.



## Real World Informatics

We have strong expertise in Managing Disparate Data Sources for Clinical Trials & Real World Data Sources.



## Scientific Informatics

Our customized scientific informatics solutions allow our clients to better understand their data through relevant processes and workflows.



## Cloud Operations

We help clients migrate their data, optimize cloud presence, and provide support and maintenance for their systems



## Registry Science

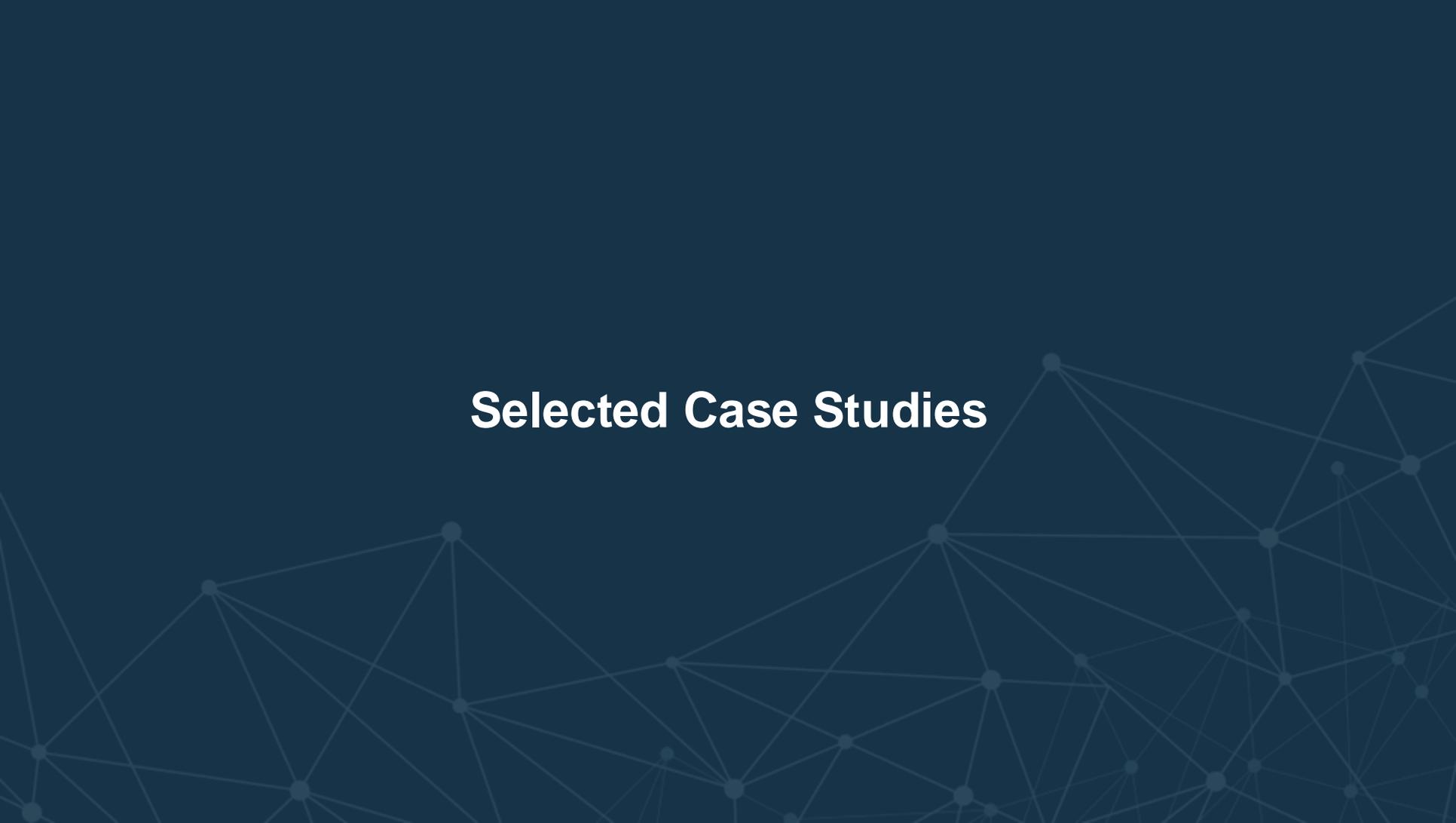
We are empowering precision medicine and complex clinical decision-making by constructing and executing high-quality registry programs for Life Science and Medical Research Foundations.



## High Performance Computing

Our HPC capabilities and accelerators allow biotech innovators to kick-start research computations in one click.

# Selected Case Studies

A network diagram consisting of numerous small, light-colored circular nodes connected by thin, light-colored lines. The nodes are scattered across the lower half of the image, with a higher density towards the right side. The lines form a complex web of connections between the nodes, creating a sense of interconnectedness. The background is a solid, dark blue color.

# Domain Centric UX/UI to Uncover Genomic Analysis Software Full Potential



Our client, [Forome Association](#), wanted to uncover the full potential of open-source genomic analysis software and reached out to Quantori for proven expertise and excellent domain knowledge.

[Learn more](#)

## Solution

- Mapped out a 3-stream plan to complete the DevOps objectives, unlock the UX/UI potential, and create an efficient testing strategy.
- Implemented build-and-deploy scripts and created a script library to employ in an easy-to-use manner.
- For testing, implemented the BDD approach, Postman for API tests, and TypeScript for automation.



# Harness Tens of Thousands of Longitudinal EHRs of Patients Across More than 10 Diseases

**Our client wanted to determine if there are genetically hidden subpopulations of patients within AID diseases (or any other diseases like Parkinson's disease) given their longitudinal EHR data and to verify them using the genomic data.**

[Learn more](#)

## Solution

- Implemented high-performance ETL pipelines to group and post-verify patients for genomically distinguished sub-populations.
- Built up leading-edge tools for extracting, polishing, and consolidating data in different formats out of various RWD sources.
- Provided scientific and pictorial interpretation to the obtained subpopulations.



# AI/ML Application to Analyze Millions of Nuclei

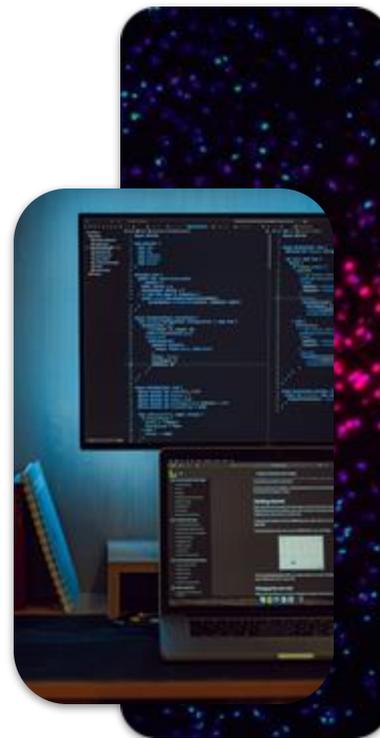


Our client engaged Quantori to undertake a complex bio-computational analysis of high-content images. This initiative required deep bioinformatics input.

[Learn more](#)

## Solution

- Delivered a highly accurate image analysis model using AWS service.
- Prepared the molecular data for supervised machine learning.
- Implemented a pipeline with AWS SageMaker using Spot Instances.
- Introduced an effective labeling solution and trained biomedical specialists for the best accuracy.



# Develop High Performance Computing Platform for Molecular Docking



A life sciences company was operating a platform built on ARM architecture with EC2 Spot Instances to reduce the compute costs and improve the application output. Quantori's challenge was to rapidly develop HPC compute environments using AWS ParallelCluster.

[Learn more](#)

## Solution

- Implemented a breakthrough HPC infrastructure accelerator for macromolecular docking of tertiary and quaternary proteins.
- Offered QHPC with DASK, ARM architecture, and new instances.
- Optimized AutoDock, Smina, and QVina.
- Introduced the UI for Python with C library.



# Testimonials



“ We are very pleased with the results using Quantori’s solution. Being able to process multiple CryoEM datasets in parallel makes handling our constant influx of data possible. We are no longer limited computationally, but as it should be in biochemistry.

Whenever we run into an issue or have additional features that we would like to be added, the people at Quantori have been great, and I often get a response from Quantori, if not a solution, in about a day. Overall I recommend Quantori for their knowledgeable, professional staff capable of providing solutions cost-effectively and efficiently.

## **Bharat Reddy**

Senior Scientist  
Rectify Pharmaceuticals

“ Quantori was able to supplement our software delivery teams at very short notice with excellent talent that quickly generated results in the most challenging areas. I am very pleased with their performance and efficiency.

## **Hakan Elmali PhD**

VP, R&D  
PerkinElmer

“ Quantori produced an industry-leading deliverable for us on a very short timeline. Their efficiency and commitment to quality are unmatched in my experience.

## **Jeffrey Carter**

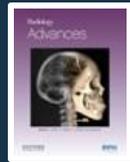
Co-Founder and COO  
Arxspan, Bruker Corp

“ Working with Quantori’s software engineering team gives us access to expertise, methods and accelerators to push the boundaries of biopharmaceutical possibilities and create insights that move our entire organization forward.

## **Leo Barella**

Vice President, Chief Technology Officer  
Takeda

# Research Publications



Mar 2024  
[LINK](#)



Feb 2024  
[LINK](#)



Dec 2023  
[LINK](#)



Sep 2023  
[LINK](#)



Apr 2023  
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Jul 2017  
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# Contact Us



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## Website

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## Social

