



**85%** reduction  
in cost of data processing  
after optimization compared  
to initial deployment.<sup>1</sup>

## Broad Institute's Use of Google Cloud: Accelerating Biomedical Research for All

The Broad Institute of MIT and Harvard (Broad Institute) is a world-renowned nonprofit academic organization that was founded to empower creative scientists to transform medicine with new genome-based knowledge. The Broad Institute uses an array of cutting-edge technologies, including genome sequencing and analysis, which produce very large datasets. In collaboration with Google Cloud and Intel, the Broad Institute optimized their genomics workloads for fast, cost-effective execution on Google Cloud N1 and N2 instances. By modularizing their pipeline workflows, right-sizing cloud instances based on the needs of the workload, and optimizing for Intel® Xeon® Scalable processors, they reduced processing costs per genome significantly. Running on Google Cloud allows the Broad Institute to scale easily and empower the research community with new capabilities for the benefit of research into solutions to human disease.

### Products and Solutions

[2nd Generation Intel® Xeon® Scalable Processors](#)

[Intel® Advanced Vector Extensions 512](#)

[Intel® Intelligent Storage Acceleration Library](#)

**Industry**  
Research

**Organization Size**  
501–1,000

**Country**  
United States

**Partners**  
Google Cloud

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<sup>1</sup> For more complete information about performance and benchmark results, visit <https://www.intel.com/content/www/us/en/customer-spotlight/stories/broad-institute-customer-story.html>