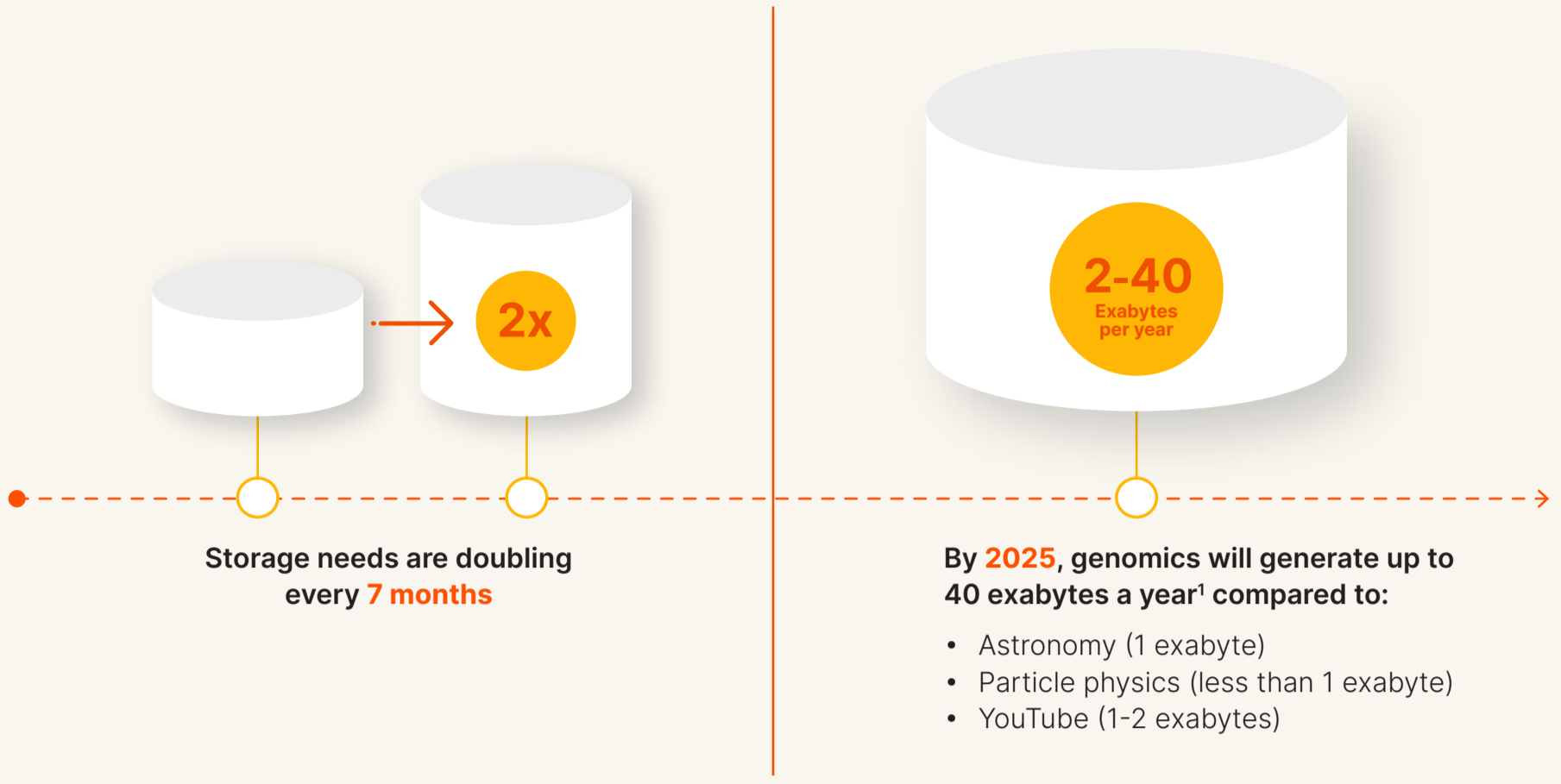




# Accelerate and Streamline Genomics Pipelines with Pure FlashBlade

## Genomics Data is Exploding at Historic Rates



## Impact of Next-Generation Sequencing (NGS)

**Healthcare**

- Genomic surveillance for infectious diseases like COVID-19
- Precision medicine for oncology and rare diseases

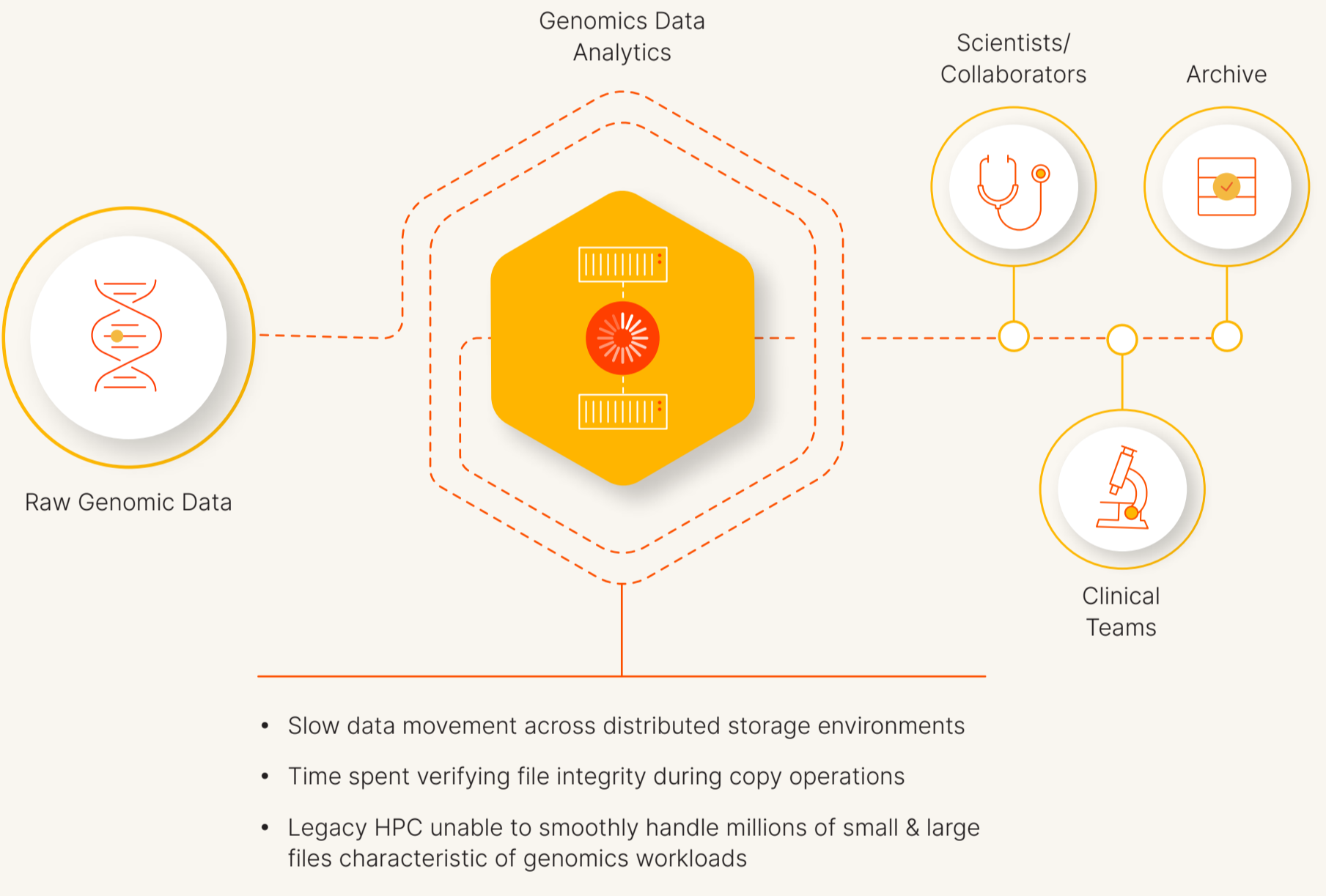
**Research Organizations**

- Identifying disease and treatment paths
- Understanding the plant and animal world around us

**Pharma & Biotech**

- Early drug target discovery
- Innovative drug and vaccine development

## Customer Challenges with Genomics Pipelines



## The Pure Storage FlashBlade™ Solution for Genomics

- Capture data directly from sequencers to conduct primary, secondary and tertiary analyses with a single, scale-out dynamic storage solution
- Speed secondary analyses by up to 24x with purpose-built parallel processing\*
- Scale to petabytes of throughput and rapid access to hundreds of millions of files
- Maintain data integrity by eliminating data movement between storage environments
- Maximize sequencer runtime with an always available and resilient storage platform



\* based on customer data compared to traditional disk-based environments

## FlashBlade® for Genomics in Action

**Chang Gung Memorial Hospital**

Chang Gung Memorial Hospital Center for Artificial Intelligence needed a storage solution to support clinical applications of AI

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**Solution** FlashBlade supports AI on genomics data

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**Results**

- Delivered up to 7x faster performance, security, and stability to power medical data analysis
- Accelerated AI-driven genetic research to improve patient care

**McMaster University**

Canada's McMaster University needed to speed time to insights from millions of genomic data points to power research on COVID-19 and other infectious diseases

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**Solution** FlashBlade to support new genome sequencing system

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**Results**

- Powered select data sets to be analyzed up to 24x faster
- Enabled closer monitoring of public health threats

## References

<sup>1</sup> Genomic Data Science Fact Sheet, National Human Genome Research Institute web site, accessed 11.22.21. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4494865/>