

# Flatiron Institute's HPC Infrastructure Accelerates Breakthrough Science

The Flatiron Institute is an internal division of the Simons Foundation that supports a community of researchers. The institute's researchers perform advanced science in fields like genomics, quantum physics, astronomy, and neuroscience. As data-intensive research grew in complexity, Flatiron needed a flexible, performant, and exceptionally scalable high-performance computing (HPC) system to accommodate the needs of hundreds of scientists. Flatiron explored many HPC architecture options and ultimately adopted a novel solution using open-source Ceph as their primary storage system. Ceph, utilizing 3rd Generation Intel® Xeon® Scalable processors, Intel® Optane™ technology, and more, gave scientists the compute power and fast storage to manipulate the enormous data sets involved in their breakthrough research.

"When past systems could not meet our scientists' growing demands, we lost valuable research time. With Ceph and Intel products behind our HPC system, we have the scale, performance, and reliability to enable breakthrough science."

**Ian Fisk, Ph.D.,  
Scientific Computing  
Core Co-Director,  
Flatiron Institute**

#### Products and Solutions

[3rd Gen Intel® Xeon® Scalable Processors](#)  
[Intel® Optane™ SSDs](#)

#### Industry

Research  
Services

#### Organization Size

201–500

#### Country

United States

#### Learn more

[Case Study](#)