# **Frequently Asked Questions**

Ready to learn more about accelerating your research with Microsoft and the NIH STRIDES Initiative? Read below to find answers to some of the top questions.

### How do I get started with Microsoft and the STRIDES Initiative?

Ready to accelerate your biomedical research? Become part of the STRIDES Initiative and unlock near-limitless cloud opportunities and support services at a discounted rate. Get in touch with the Microsoft STRIDES Initiative team to get started: <u>https://aka.ms/STRIDES</u>.

# What is the NIH STRIDES Initiative?

The NIH Science and Technology Research Infrastructure for Discovery, Experimentation, and Sustainability (STRIDES) Initiative aims to accelerate biomedical research by providing access to cost-effective, advanced cloud technology and services to optimize processing, storage, and analysis of large datasets and computationally intensive workloads.

Through its partnerships with industry-leading, commercial cloud service providers (STRIDES Initiative partners), the STRIDES Initiative offers NIH-funded researchers access to rich datasets and state-of-the-art computational infrastructure, tools, and services at a discounted rate. The STRIDES Initiative further supports researchers through consultations, cloud training, program set-up, and reporting services.

## How can Microsoft and the STRIDES Initiative help me achieve my goals?

Whether you are in a leadership role at a research university, on a collaborative research team, or an individual researcher managing your own project, your primary research goals are likely the same: quickly and easily run complex workloads, reduce costs, easily access and manage research data, and collaborate with colleagues.

Joining the STRIDES Initiative with Microsoft grants you access to industry-leading cloud infrastructure, powerful analytics tools, and customized technical support—accelerating your biomedical research speed, capacity, access, and collaboration at a discounted rate.

• Quickly and easily run complex workloads

Processing and analyzing data in the cloud greatly reduces the compute time and long wait queues associated with on-premises computing. Faster and more efficient data processing improves data reliability while shortening the time to publish.

Reduce costs

Enjoy the benefits of the most up-to-date, industry-leading cloud compute technology at a discounted rate—while avoiding the costs of keeping on-premises data centers up-to-date, secure, and compliant.

### • Easily access and manage research data

By migrating data to the cloud, researchers can access, process, and analyze rich datasets whenever and wherever they want—with near-limitless storage capacity. New to the

cloud? Microsoft provides customized technical training for researchers and data owners to optimize use of cloud services and tools.

### • Collaborate seamlessly

Leveraging the cloud environment allows researchers to access and share biomedical data and insights across teams, departments, and organizations—driving innovation, breaking down silos, and expanding the research ecosystem.

# What benefits does Microsoft provide through the STRIDES Initiative?

Enrolling in the STRIDES Initiative with Microsoft enables access to industry-leading cloud environments, services, and tools at a discounted rate to accelerate your biomedical research. In addition, Microsoft provides the following benefits to researchers:

### • Special STRIDES pricing

Enjoy special STRIDES-only pricing on the most up-to-date cloud technology—including a data egress waiver

### • Cutting-edge technology

Drive discovery with the most advanced and secure computing technology, high-value research datasets, and AI analytics

### • Research expertise

Access enterprise-level support from subject matter experts specialized in biomedical research workloads

Custom training

Receive customized technical training empowering you to easily manage your research in the cloud

## Why should I select Microsoft over other STRIDES Initiative partners?

While joining the STRIDES Initiative has many advantages, choosing the right cloud provider is critical to getting the greatest and most sustainable research benefits from the cloud. Microsoft offers a world-class partnership, backed by state-of-the-art technology, and a team of experts ready to work with you to make discovery possible. Some benefits of this partnership include:

- Support from thousands of research computing experts Access bioinformaticians, data scientists, and engineers to address the unique challenges of working with complex datasets and advanced cloud technology.
- More choices with open-source software (OSS) Operate on the technology you know and trust with the largest cloud platform contributor to OSS on GitHub—running Linux on more than 50% of VM cores.
- Rich partner ecosystem

Explore and implement thousands of technical and consulting services or end-to-end solutions built by partners—including DNAnexus, Illumina (DRAGEN), and many more.

### • Deep research investment

Work with a partner who has invested \$10.4 billion in research, supports more than 125 research teams, and has published over 22,000 academic research papers since 1991.

• Collaborate across teams in real time Seamlessly share and store templates, datasets, containers, and spreadsheets in a unified hub with Microsoft Teams and Azure Jupyter Notebooks.

# Why is Microsoft Azure the best cloud for my biomedical research?

When it comes to computing technology, researchers need a cloud that just works. Microsoft Azure brings together the power, intelligence, flexibility, and security researchers need to run the most computationally intensive workloads with ease and peace of mind.

### • Powerful computing

Maximize the full range of CPU, GPU, FPGA, and fast interconnect capabilities with InfiniBand to reduce job completion times from days to minutes.

### • Seamless open-source integration

Deploy your preferred open-source software directly on Azure, including NAMD, Gromacs, Cromwell, PyTorch, TensorFlow, and RELION.

### • Advanced insights

Gain deeper insights into your data faster by building and training new AI models with automated machine learning and autoscaling cloud compute.

### • Flexible Infrastructure

Enhance your on-premises equipment with the only end-to-end hybrid infrastructure for the cloud—flexibly scaling to meet your workload demands.

### • Secure and compliant

With over 90 global compliance offerings and \$1 billion invested in security each year, Azure provides peace of mind, so you can focus on research.

## How do I learn more about doing research on the cloud?

Learn more about research on the cloud and how Microsoft Azure can help you unleash nearlimitless data compute, storage, and analysis capabilities.

- How Microsoft drives breakthrough research
- Explore how Azure supports health and life science innovation