NIH supports research projects that generate tremendous amounts of biomedical data. Much of this research data has traditionally been stored and made available to the broader community through public repositories or at local institutions. This model, however, has become strained and hard to sustain as the amount of data generated in these rigorous research projects continues to grow. The Science and Technology Research Infrastructure for Discovery, Experimentation, and Sustainability (STRIDES) Initiative addresses the problems of data storage and accessibility by harnessing the power of the commercial cloud in support of biomedical research.

The STRIDES Initiative, one of many NIH-wide efforts to implement the NIH Strategy for Data Science (datascience.nih.gov/strategicplan), is designed to enhance biomedical discovery and improve efficiency through new digital data management strategies that contribute to NIH efforts to develop and sustain a modern biomedical data ecosystem.

Through partnerships with commercial providers, the STRIDES Initiative provides a cost-effective way for biomedical researchers at the NIH and at NIH-funded institutions to access rich datasets and the most advanced computational infrastructure, tools, and services provided by STRIDES Initiative partners. The overall goal of the initiative is to accelerate biomedical advances by reducing economic and technological barriers for accessing data and resources. A central tenet of the STRIDES Initiative is that data made available through these partnerships will incorporate standards endorsed by the biomedical research community to make data findable, accessible, interoperable, and reusable (FAIR), while employing appropriate safeguards for controlled access data.

The STRIDES Initiative aims to achieve the following outcomes:

- Facilitate researchers’ access to and use of high-value NIH research data that are currently stored on, or will be moved into, cloud environments.
- Enable researchers’ transition to commercial cloud technologies through a cost-efficient framework.
- Provide NIH researchers access to and training on new and emerging cloud-based tools and services to enhance cutting-edge research.
- In close coordination with the NIH Office of Data Science Strategy and other NIH initiatives in data science, contribute to the formation of an interconnected ecosystem that breaks down silos that inhibit generating, analyzing, and sharing research data.

In addition to broadening access to rich datasets, the STRIDES Initiative provides the following benefits:

- **Access to STRIDES Initiative Partner Services** – Favorable pricing on computing, storage, and related cloud services for NIH ICs and NIH-funded institutions.
- **Professional Services** – Access to professional service consultations and technical support from STRIDES Initiative partners.
- **Training** – Access to training for researchers, data owners, and others to help ensure optimal use of available tools and technologies.

*Note: The choice of participating STRIDES Initiative partners determines the type of pricing, training, services, and tools available.*
STRIDES INITIATIVE PARTNERSHIPS

The STRIDES Initiative now has agreements in place with Amazon Web Services and Google Cloud. We anticipate forming additional industry partnerships in the coming months to ensure that NIH continues to be poised to maximize the value of data obtained through biomedical research.

FOR MORE INFORMATION

For more information on the STRIDES Initiative, visit the Data Science at NIH website at datascience.nih.gov/strides or contact the NIH STRIDES Initiative team at STRIDES@nih.gov.