



# Scaling AI in Life Sciences

Preparing for larger models and enabling cost effective scaling across the value chain

Life Sciences companies are increasingly using data, machine learning processes and technology to drive and accelerate value. However, silos of compute as well as suboptimal data and code practices are reducing scientist productivity, ROI and drug program success. WWT and partners including NVIDIA are addressing these challenges by using data strategy services, code optimization practices and purpose-built AI infrastructure to deliver cost-optimized, hybrid cloud machine learning (ML) platforms.

## Use cases for life sciences

### R&D focus areas (algorithm-driven)

- Computational chemistry
- Natural language processing (NLP)
- Structural biology
- Genomics

### Business-area driven

- Clinical trials
- Supply chain
- Commercialization

## Improve productivity and the user experience

Limited GPUs as well as burdensome code management and data preparation practices can decrease data scientist productivity. It can also result in job dissatisfaction, distraction from the company's core mission, inflated costs, and reduced value creation.

These issues can be addressed with a hybrid cloud ML platform that is supported by a comprehensive data science program. Leveraging WWT services along with NVIDIA software and hardware including the DGX H100 SuperPOD™ for Drug Discovery enables companies to identify and address areas of friction, ultimately driving increased productivity and an improved user experience.

## Deliver tangible benefits while supporting future innovation

### Data

Enhance data scientist value creation and productivity

### Science

Reduce experiment cycle time and drive higher GPU utilization

### MLOps

Move more models into production faster

### Infrastructure

Improve ROI and control costs

## Enhance data scientist value creation

Most data scientists spend at least 30% of their time identifying and preparing data for use in experiments and large-scale training. With our hybrid cloud solution, you can leverage WWT data strategy services to ensure data scientists can obtain the right data quickly and easily. This improves value creation and job satisfaction.

## Move more models to production faster

Enable faster code iteration and expedite moving models to production by establishing repeatable steps and creating a platform for best-practice sharing through the proper use of MLOps practices, code management tools and code processes.

## Improve infrastructure ROI and TCO

GPU utilization rates often struggle to reach and sustain projected ROI within expected timeframes. Ops-in-code increases automation and exposes hardware calls, driving up utilization and reducing the time data scientists spend on managing hardware.

## Leverage proven infrastructure and services from life sciences experts

Our deep domain experience enables us to work fast and deliver value quickly. Our dedicated Life Sciences team has expertise in computational chemistry, biomedical engineering, computational biology and other related areas.

Together, WWT and NVIDIA deliver a fully validated operating environment for infrastructure management, data science, and research along with an NVIDIA-engineered solution for streamlined scalability and predictable performance.

WWT's consulting services combined with NVIDIA hardware and software help life sciences companies reduce organizational silos, improve scientist productivity, reduce costs and ultimately increase drug program success.

***Learn how we can help solve your toughest challenges at [www.wwt.com/life-sciences](http://www.wwt.com/life-sciences).***



### Consulting services

- End-to-end Scaling AI program management
- Business use case development and prioritization
- Data scientist user experience optimization
- Data strategy (e.g., governance) and operations
- Outcome-focused frameworks for technology selection



### Solutions

- MLOps integration and DevOps practices
- Cloud operating models
- Security architecture for IP protection
- Service introduction and operational support
- Strategic resourcing



### Technology

- GPU-accelerated system (e.g., 2-40 nodes NVIDIA DGX™-based infrastructure)
- Storage devices and software platforms for data fabric
- Automation platforms
- Optimized AI and system software including scheduling and orchestration (e.g., NVIDIA AI Enterprise; NVIDIA Base Command)
- Networking hardware and software