

DARK FIBRE

Healthcare & Research

## 100 Gbps Dark Fibre Link for Medical Research Campus

A medical research institute opened a second premise while its compute and storage servers remained in the original building. Staff needed seamless, low-latency access to large genomic and imaging datasets from the new site.

### KEY RESULTS

**100Gbps**

dedicated dark fibre link

**<1ms**

latency between premises

**2**

buildings on one logical LAN

**0**

shared internet dependency

### BEFORE

- New research premise had no local servers; all compute and storage sat in the original building
- Researchers needed to move multi-terabyte imaging and genomic datasets between sites daily
- Standard internet and VPN links were too slow and introduced unacceptable latency for real-time analysis
- Any outage would halt time-sensitive clinical trials and collaborative research

### AFTER

- 100Gbps - dedicated dark fibre link
- <1ms - latency between premises
- 2 - buildings on one logical LAN
- Surveyed both premises and the street route to confirm dark fibre path feasibility

*"The dark fibre link feels invisible. Our researchers work from the new building exactly as they did from the original site, even with datasets that used to take hours to transfer."*

- IT Director, medical research institute