



## What ORION can do for hospitals & health research

### Our network’s speed, capacity and global access are helping them save more lives.

They can continuously stream the real-time vital signs of premature babies to advanced research computing facilities. They can use the power of genomics and advanced computing to give children hope for the future. They can deliver large quantities of rich content in high fidelity to share their expertise with

healthcare professionals worldwide. And they can use the data they access to make more informed decisions in healthcare policy-making and create more tailored and effective health plans for patients.

But that’s not all.

### We let medical researchers visualize and share brain data.

“We are transferring hundreds of gigabytes of information from Baycrest to McGill and outwards. What we do would be very difficult without ORION.” *CBRAIN*

### We enable potentially life-changing interdisciplinary collaboration.

“Effective research requires high-capacity infrastructure that can support intensive data transit. The collaboration among biomedical researchers, computer scientists, and software engineers, supported by advanced infrastructure... is imperative if we are to save lives. It’s that simple.”

*Ontario Institute for Cancer Research*

Key features	ORION	Other networks
Network	Exclusively for Research, Education & Innovation (RE&I) users More secure than public networks Not for profit	Public – open to all For profit
Internet	Speeds up to 100 Gbps Vast bandwidth for big data, high traffic Low latency for streaming media Rates based on sector and capacity needs	100x-1000x slower* Rates must provide a profit
Access to RE&I networks	Direct, easy access to Canada’s National Research and Education Network as well as other RE&I networks worldwide	No direct access Bandwidth too low for big data
Cybersecurity	DDoS Threat Protection included Anycast DNS service included 24/7 DDoS Threat Protection available Cybersecurity awareness training available	May not be included Greater vulnerability to viruses, hackers, breaches, malware & ransomware**
Community training	Professional development for RE&I cybersecurity & IT professionals Flexible online training CodeRed learning platform	Quality, cost and scope vary widely Training geared to general audiences
Access to research data repositories	Fast, direct access to the Federated Research Data Repository, the Ontario Health Data Platform and others	Quality of connection varies widely limited by bandwidth requirements
Access to high-performance research tools	Fast, direct access to ARC / HPC facilities for big data research Unsurpassed ease & quality of connection	Quality of connection varies widely limited by bandwidth requirements

\*In 2020, Canada’s highest reported download speed among public networks was 583.7 Mbps – just over half of one Gbps. The next highest was a quarter of that. PCMag, Statista

\*\*1 in 4 organizations in Canada had a security breach in 2020; another 38% were unsure if they had. CIRA

What can we do for you?  
Find out by calling 416-507-9860 or by  
emailing [communitydev@orion.on.ca](mailto:communitydev@orion.on.ca)

**ORION** Empowering  
Innovation

Part of Canada’s National Research and Education Network