

## Eligible Costs Related to HPC for the 2017 Bioinformatics and Computational Biology Competition

### 1. How does Genome Canada define HPC?

For the purposes of this Competition we have decided to use the definition used by CFI in their 2017 Policy and program guide. CFI now uses the term “advanced research computing (ARC)”, however we will continue to use the term HPC for consistency with the RFA.

High-performance computing (HPC) infrastructure encompasses any computing system with capabilities larger or more powerful than typically available in a standard desktop system. Such HPC infrastructure normally includes systems or resources such as the following:

- Capacity or throughput computing
- Capability computing supporting tightly coupled, fine grained applications
- Shared memory systems
- Systems supporting very large memory requirements
- High-performance storage
- Long-term storage
- Cloud computing
- Computing using specialized accelerators including GP-CPU and others
- High-performance visualization systems
- Systems suitable for computational steering and interactive use

Typically, such systems cost more than \$100,000.

In each case the term HPC encompasses the software and environment needed for a given discipline to effectively utilize these types of infrastructure and encompasses needs such as high levels of data security and integrity as may be required by specific disciplines or researchers.

### 2. What types of equipment are eligible in this competition?

Generally speaking, equipment is an eligible expense in this competition as defined in the [Guidelines for Funding](#). However, as the RFA states, “costs for high performance computing infrastructure” are ineligible. HPC components comprising a system will not become eligible by splitting them into their component parts.

### 3. Is it permissible to use as co-funding equipment purchases needed to do the work but funded by others, presumably on a prorated basis?

Specific costs are in principle either eligible or ineligible for the project budget as a whole, whether GC funded or co-funded.

### 4. Can you provide some examples of eligible and ineligible costs related to equipment for this competition?

#### A. Examples of Eligible Costs

- Reasonable costs for non-HPC computing hardware
  - e.g., Desk-top or laptop computers that allow members of the project team to conduct the proposed research
  - Hard disk arrays for increased performance
- Access costs to HPC or cloud computing services

**B. Examples of Ineligible Costs**

- Any computing equipment for long term data storage

**5. How will the final decision be made on whether specific equipment items are eligible?**

The [Guidelines for Funding](#) require that for equipment to be eligible that it must be “used wholly or in part for the research proposed”. The review committee will decide whether enough use will be made of the equipment for the project budget to pay for all or some portion of it. The committee will also make the final decision on eligibility of the equipment given the justification provided in the application.