**Project Title**

**PI Name and Department**

**Computational Resources Requested**

|  |  |  |
| --- | --- | --- |
| **Resource Type** | **SUs Requested** | **Maximum SUs allowed** |
| **MPI** |  | **2,400,000** |
| **SMP standard (default)** |  | **875,000** |
| **SMP specialty (high memory)** |  | **125,000** |
| **HTC** |  | **500,000** |
| **GPU** |  | **100,000** |

* For details of each Resource Type, please see <https://crc.pitt.edu/resources>
* MPI nodes are for tightly-coupled codes that are parallelized using the Message Passing Interface (MPI) and benefit from the low-latency Omni-Path or Infiniband interconnect fabrics.
* SMP nodes are appropriate for programs that are parallelized using the shared memory framework. They are also appropriate for those who want to move up to supercomputers while keeping the programming style of their laptops, e.g want to run MATLAB. Some of these nodes have RAM with up to 512GB of shared memory.
* HTC nodes are designed for High Throughput Computing workflows such as sequence analysis and some data-intensive analytics.
* The GPU nodes are intended for applications that are specifically written to take advantage the large number of cores in graphics cards for accelerating the computation.

**Project Description**

2 page limit. The proposal text should include benchmark results and usage projections that justify the requested amount of SUs below.

**Funding Sources**

*List of grants.*

**Involvement of CRC Consultants**

*If a CRC consultant was involved with facilitating your research in any way, please described his/her contribution.*

**References**

1. Ref 1
2. Ref 2

**Publications acknowledging use of CRC (or SaM) resources over the past year**

1. Ref 1
2. Ref 2