# Request for Grex Resources

**0. The Applicant**

Name of PI *[last, first]*:

Department:

Faculty:

Email:

**1. Introduction to the Research Problem and Research Justification**

*Outline the research problem for each project, its importance/relevance, as well as your general objectives. [¼-½ page]*

**2. Technical Justification**

*This section addresses the technical details of your computational and/or storage needs for each project to ensure that resources are used as efficiently as possible, that requests are reasonable, and appropriate for the system being used.* *[¼-½ page]*

**3. Request for Grex Compute and Storage for 2023/24 year**

**3.1 Allocatable Compute Requirements**

*Specify your compute requirements, in CPU cores per year (Core Years). Only Grex’s new Skylake compute nodes (2828 CPU cores total) are allocatable this year. In this document, please justify the stated computing needs and describe your level of confidence and experience with HPC computing use. Explain how you estimated the total amount of compute time required for this project.*

**3.2 Storage Requests**

* *This year, the new /project storage is generally allocated by default, to 5 TB/group extensible to 20 TB/group on RAS request*
* *Users from Science and Engineering may apply for extended /project storage. Please describe your stated storage needs and explain how you estimated the total amount of storage required for this project.*

**3.3 Code Details, Performance & Utilization**

*List special software requirements associated with your application. Is anything specific to be considered regarding code performance when allocating resources for your project, (e.g., if there are particular operating system or processor architectures for which the code is best suited, or if it is known to scale efficiently to a certain number of cores) please provide additional information here - otherwise leave blank.*

**3.4 Memory Requirements (optional, complete only if required)**

*Specify memory requirements for the Allocatable compute above, either per-core or per-node. If there is any additional information you would like to provide regarding memory requirements, please provide additional information here - otherwise leave blank.*

**3.5 Additional Compute Requirements (Legacy and GPUs) (optional, complete only if required)**

*Please highlight your interest in GPU compute nodes and needs, if any, of the Legacy compute nodes (for example, running massive parallel codes across hundreds of nodes). GPUs and Legacy nodes are available for opportunistic use, so these do not count towards your total Core-Years request above.*

**4. Progress Since Last local RAC Round**

*Please indicate, which of your publications were enabled by your use of Grex local compute resources, and how use of Grex was used for training of HQPs.* *Please highlight any notable Grex local RAC-enabled research that you have performed. This may refer to publications record, or it may be a work in progress.*

Please send the filled Application to [arc@umanitoba.ca](mailto:arc@umanitoba.ca) . Thank you!