Policy on Allocation of High Performance Computing (HPC) Resources [DRAFT]

Guiding Principles:

1. The ultimate authority for High-Performance Computing (HPC) resource allocation resides with the campus President. The President's designee for research HPC resource allocation is the Senior Vice President for Research (SVPR). The SVPR will received guidance and recommendations on HPC matters from the HPC Faculty Advisory Committee (HPCFAC). The HPC Specialist will manage any HPC resources at DHSU, under the supervision of the HPCFAC and the SVPR.

2. "HPC resources for research" are defined in this document to include any physical on-premise supercomputers, cloud computing, and hybrid systems that are used for research purposes. These resources include, but are not limited to, storage, processing power, databases, networking, analytics, artificial intelligence, and software applications.

3. HPC resource allocations are not indefinite and will be periodically reviewed and adjusted, when necessary, to reflect changes in (1) the availability of HPC resources, (2) the research group's direction, size, scope and nature of research, and (3) research group's funding and the source of that funding (see #7, below).

3. As a general rule, research groups should be allocated HPC resources appropriate to their needs upon availability. When those needs change, such as:
a. when a research group no longer meets the requirements outlined in #4, #5 and #6 (below), the HPC resources allocated to the group may be reduced or removed.
b. when a research group's funding increases significantly such that there is a credible case that allocated HPC resources are insufficient for their research portfolio, they may be allocated additional HPC resources (available resources permitting).

Implementation:

4. To be eligible for assignment of HPC resources, research groups must first, and continuously, be fully compliant (or become compliant within 30 days of notification of non-compliance) with all rules and regulations, including those established by external regulatory authorities (including EPA, OSHA, PESH, Fire Marshal) and all relevant DHSU facilities and oversight entities (including, but not limited to, RF, IT, FM&D, EHS, and OCAS).

5. The SVPR, HPCFAC and HPC Specialist may agree to charge a fee from each research group to support the maintenance of HPC resources. This fee may depend on the amount and duration of the resources requested (e.g. $50 / TB of disk storage / year to support the maintenance of an on-premise HPC). Research groups may pay this fee through extramural funding, department/institute funds, or any other appropriate source of funding. Appropriate mechanisms will be put in place to facilitate this payment. To be eligible for allocation of HPC resources, research groups must first, and continuously, be fully compliant with any fee

payments requested. The SVPR and HPCFAC reserve the right to provide funding programs, waivers or other mechanisms to facilitate the fee payment process.

6. Certain HPC resources will require research groups to cover partial or full costs of the resource (e.g. commercial cloud computing resources). These HPC resources may be made available to research groups through contract agreements between DHSU and the service providers. Research groups may pay the costs of these resources through extramural funding, department/institute funds, or any other appropriate source of funding. Appropriate mechanisms will be put in place to facilitate this payment. Allocation of these HPC resources will require research groups to be fully compliant with any required payments. The SVPR and HPCFAC reserve the right to provide funding programs, waivers and/or other mechanisms to facilitate the payment of these HPC resource costs. The SVPR and HPCFAC may sign contracts or service agreements to provide additional benefits associated with these HPC resources, such as discounts, training and/or technical support.

7. If the demand exceeds the available HPC resources, for fully compliant research groups (per #4, #5 and #6), HPC resource allocations will be guided by the following prioritizations (in descending priority):

a. Research groups that satisfy any specific requirements of the HPC Resource, such as those outlined by the funding organization (e.g. on-premise HPC obtained through NIH funding may require giving priority to research groups described in the awarded grant).

b. Research groups who have secured peer-reviewed grants that bear full indirect costs. Expenditure of these monies should be directly related to the use of HPC resources provided.

c. Research groups who have secured peer-reviewed grants that bear indirect costs at less than the current federal rate. Expenditure of these monies should be directly related to the use of the space provided.

d. Currently unfunded research groups who persistently pursue indirect cost-bearing extramural funding with credible grant applications (at least one application per year) after expiration of their grants. If extenuating circumstances exist, exceptions to this can be made.

HPC resource allocations for new research groups will be made without consideration of extramural research funding. New research groups will be allowed a minimum of three years to obtain extramural funding before the above criteria become applicable.

The fundamental principle is that HPC resource allocation should be commensurate with and proportional to research productivity and demonstrated research need.