

CORE-HOUR CHARGES FOR USE OF COMPUTATIONAL CLUSTERS

The objectives of the charging structure are as follows:

- i. Establish a structure so costs can be defrayed via direct budget lines in grant/contract proposals;
- ii. Motivate considered/wise use of the computational resource;
- iii. Foster a community of stakeholders.

These objectives are per the intent of the UNC-Chapel Hill executive administration upon agreement to procure the KillDevil computational cluster.

The structure below is the result of iterated reviews by the Research Computing Advisory Committee (RCAC), the Research Computing Coordinating Committee (RCCC), individual interviews with affected investigators, and consultation with the Cost Analysis area of the Office of Sponsored Research.

In summary, the charge-back structure is:

1. Institutional allocation of 200,000 core hours per year to every lead investigator at no cost to the investigator;
2. Charge of \$.005 per core-hour per year for each additional hour beyond the institutional allocation.

(Please note: patron status, which has been available since the inception of the clusters, remains available at \$6500 per 16-cores, for a 4-year service period—use of patron resources incurs no additional charges for the service period.)

There are two administrative caveats. First, charges less than \$1000 will not be collected. Second, there will be an exception process to address appropriate uses for which funding is inadequate or unavailable. The exception process is progressive, escalating from the Assistant Vice Chancellor for Research Computing to the RCAC, then to the RCCC. Application for an exception constitutes a request for additional institutional allocation, and there is no guarantee of approval. The process ensures transparency and sufficient organizational oversight.

The exception process is to address various cases. A few examples, but not limited to the following:

- (a) An investigator may support a project that is part of an educational or degree-seeking program where computation is inapplicable to a research program or project. (E.g., this investigator may request an exception for all his/her student's computational burden.)
- (b) An investigator may have a program or project that was not expected to have any computational demand, yet midway through the effort it became clear that a computational component would further the project and position the investigator and university for future productivity. (E.g., this investigator may request an exception to enable/further the existing project and develop future projects in excess of his/her institutional allocation.)
- (c) An investigator may have undertaken a project, and had some wherewithal to complete a significant computational burden, but unanticipated numerical methods or other impacts emerged which entailed a computational overage. (E.g., this investigator may request an exception for computational charges in excess of \$15,000 in a given year.)

Investigators have received monthly utilization reports since February 2013; investigators have been informed that utilization after July 1, 2013, is *eligible* for charge-back. Since this charge-back structure has yet to be formally approved, we waive charges for fiscal year 2013-2014.

Given the period of time over which utilization reports have been distributed, this structure will be formally approved, applied, and effective on July 1, 2014.