

Report of the Research Computing Subcommittee – ITTC Meeting Jan 18, 2012

At the request of the CIO, Margaret Cline, the Research Computing Subcommittee (formerly Task Force) of the ITCC met on Jan 12, 2012 to assess the research computing support on campus [Drs. Hale, Madison, Medvedeva, Tauritz, Vojta, and Wang attended, Drs. Dawes, Gao and Price sent input via email]. The committee discussed both the faculty expectations and the current status of research computing on campus.

The main conclusions of this discussion are as follows:

- The overall environment for research computing has improved since the last such assessment three years ago because IT has committed resources for hardware upgrades (in particular for the NIC cluster) and because there is now a (small) dedicated research support group within IT.
- However, the degree of support that this group can provide is not sufficient for a research university such as S&T. Several faculty expressed the opinion that the research computing support here at S&T is severely lacking compared to other, comparable universities.
- The committee feels that this lack of support negatively impacts the research capacity on campus, it makes it harder to obtain external funding and, importantly, it hinders the recruitment of the best new faculty as well as the retention of current faculty.

During the committee meeting, a number of specific issues received particular attention.

- Several faculty requested that some type of off-hour/emergency support be available for widely used research systems, especially the NIC cluster. This is necessary to prevent small problems from leading to extended down times (for example, over the weekend) for critical research projects. Ideally, a support person should be reachable via phone and/or email during these hours (or, at least, research related support tickets should be processed directly by the research support group without having to go through the general Helpdesk).
- The committee feels that the support for individual research computing (including general Linux support) beyond the widely used systems such as the NIC is not sufficient. Often, a faculty member would like to discuss some non-standard idea with a computing specialist, and the current research support group does not seem to have the capacity to do this.
- The committee is particularly worried that each of the three support areas (high-performance computing/NIC, electro-mechanical, data collection) is currently supported by a single person only. If this person gets sick or leaves the university, research computing will be severely impacted.

The Research Computing Subcommittee therefore urges IT and the campus at large to increase the support for research computing so that S&T faculty can effectively compete with faculty at other research universities. In particular, we urge IT to immediately increase the size of the research computing support group by at least two technically trained people so that the present staff has the help it needs to meet emergencies and to provide assistance to faculty planning new computing facilities. In order to attract qualified people and to prevent the current personnel from leaving it is essential that the campus pay adequate (market) salaries. In addition, the committee believes that adequate research support requires a permanent dedicated funding stream to keep the equipment up to date. We urge the S&T administration to find a way to make these changes possible.