MEMO



To: Steve Addison, Dean of CNSM From: Patrick Desrochers, Department of Chemistry

Re: Anticipated problems with proposed IT change to campus computers

Date: September 8, 2016

Over the past week I polled my faculty for feedback and concerns regarding the changes proposed by IST (see Council of Deans minutes dated 08/03/2016) for all campus computers. Not surprisingly my department faculty shared many significant and varied concerns. These are enumerated below.

- Individual ability to download new trial software will be restricted, reducing productivity and scholarly activity. For example, it is common to test and download bioinformatics or crystallographic freeware programs useful both in research and in instructional settings. It would be very inconvenient to wait on IST every time a new program wants to be tested. Related to this are OS or application updates. These are released by Apple/Microsoft/whoever makes the software rather frequently (usually at least a couple of updates a week) and require admin access to install. Waiting on IST for each of these updates would also be very inconvenient, reducing faculty productivity and undermine innovative instruction.
- **IST super-administrative control over daily-use computers restricts academic freedom and opens a potential weakness in access to academic and confidential personnel records.** Faculty were universally reluctant to allow IST access to computers on which they write exams, academic progress reports, letters of recommendation, tenure and promotion documents, etc. Limited control, where <u>IST must request administrative access on a case by case basis</u> to our computers, was viewed more favorably. It is worth noting that a *senior administrator* was recently convicted of commercial burglary resulting from exam theft in faculty offices. The IST proposal does nothing to reduce this likelihood and increases the chance it could happen again. Such super-administrative access essentially affords a "key" to every office computer where these sensitive files are stored.
- Faculty are flatly opposed to IST having super-administrative control over laboratory and instrument control computers. Research computers are configured for highly specific purposes, often running proprietary/original/one-of-a-kind software, sometimes purchased with personal funds. Further, the A-to-D or other hardware interface is often highly specific to an instrument/cpu configuration. The department consensus is that IST's ability is dubious to effectively navigate the myriad computer applications across our own department to say nothing of the whole college and campus. A simple error in a computer configuration could render millions of dollars of instrumentation unusable, or worse, (for example in the event of an unintended vacuum release or magnet quench) permanently damaged.

- Is IST willing to pay for software and hardware upgrades made necessary by incompatibility of their new changes with existing older equipment? For example, several high-use instruments utilize XP-computers with older larger chassis that can accommodate larger interface boards. The instruments are working well, supporting both teaching and research, and they are maintained in this configuration in-house. This internal maintenance saves the university considerable and unnecessary upgrade costs, as much as \$5000 for software and hardware per situation. It seems unlikely that IST has sufficient financial resources to pay for any of these expensive upgrades, although the department would welcome cases were IST would be able to pay for and install new computer/software upgrades that do not reduce the functionality of these older instruments.
- Would IST's proposed changes force restrictive/limited file structure on computers, thereby reducing usability and file organization optimized for individual needs? For example Windows defaults are not always the best way to go, although that's what people in IST in the past have encouraged (such as only using the Documents folder under my user profile to store my documents). If they were to enforce such a system (which is little better than no organization whatsoever), it could make it difficult and time-wasting to hunt down needed information.
- Is IST prepared to transfer what must very large volumes of important data from old hardware to new, and ensure that it remains just as usable and accessible with the new configuration?

cc: Lori Isom (faculty senator), Chemistry Dept, CNSM chairs