

**Leica confocal moves to BRLs in May 2002:**

The Leica TCS4D confocal microscope will move out of LSN during the week of May 20, 2002. The instrument should only be “out of commission” for two days and then will be ready for use in its new location (*room G109 of the Basic Research Labs, near the northwest corner of the Arizona Health Sciences Center*). For the next several months the administration, billing and scheduling for the microscope will remain the same (*Arizona Research Labs*). Ultimately the Leica confocal microscope will be administered by the Arizona Cancer Center’s imaging facility. The microscope will still be available for non-AZCC users after the change in administration. More details regarding this change will become available in the next few months. If you have problems with the Leica confocal, or if someone in your lab would like to be trained on the system, contact Doug Cromey as usual.

New multi-photon confocal to be set up in June 2002:

The Zeiss 510NLO multi-photon confocal will be installed in LSN 410 in mid-June 2002. Since we will need a little time to grow familiar with the instrument, training for this instrument will probably not be available for users until later in the summer. If you have a specific project that you would like to try on the new instrument, please feel free to contact us. More details on this instrument will be available in the summer newsletter.

Archiving data to CD-R:

- CD-Rs will hold approximately 590MB of data. The difference between 590MB and the total capacity of 640MB is due to the formatting information needed to make the disk accessible in other CD readers. (*Note: CD-RW disks are not considered a reliable form of long-term storage and many CD-ROM drives cannot read these disks.*)
- Do not perform other computing tasks while the computer is writing to a CD-R (*temporarily disable screensavers*). If there is a break in the data stream to the hardware, the session fails and the CD-R media becomes useless. To ensure the most reliable flow of data it is also recommended that you write the CD-R from data that’s located on the computer’s local hard disk and not from a shared network drive.
- Data is valuable and it can be expensive to reproduce. It may be wise to make two CD-Rs from the same data and treat one like a backup (*stored separately in a cool dark place, away from direct sunlight*).
- CD-R media varies widely in price. It is very important to ensure that the media is rated at least as fast as the fastest speed of the CD-R hardware (2X, 4X, 6X, 8X, 12X). Given that data is valuable, it is probably wisest to stick with “name-brand” CD-R media to ensure a successful transfer of data to the CD-R and maximum longevity of the media. CD-Rs that use phthalocyanine dyes (*surface looks gold colored*) or metallized azo dyes (*surface looks blue colored*) are considered to have the maximum longevity of the currently available media types.
- The top (*label*) surface of a CD-R is actually very close to the data layer of the disk. Use of a sharp instrument to label the disk may damage the data layer and ruin the disk.
- Some software allows for creation of “multi-session” CD-Rs. Please be aware that not all CD drives can read multi-session CDs. For maximum compatibility, write your data to CD-R in one session and then “close” the CD so that it can’t be written to again.
- There are several different standards that can be adhered to when creating a CD-R. Some software can create “mixed mode” or “hybrid” CDs that allow for long filenames to be read on multiple operating systems.

Standard	Compatibility	File name limitations	Comments
ISO 9660	All operating systems	File names must be in the DOS standard (8+3) character format. Folders/directories may have 8 characters only. Characters should be letters and numbers only.	ISO is the International Standards Organization.
Joliet	Windows Macintosh* Unix*	Filenames may be up to 64 characters in length, including spaces. Joliet also records the associated DOS-standard name for each file so that the disc may be read on DOS systems or earlier versions of Windows.	Macintosh computers may only see the truncated DOS-standard file name. There is a freeware utility for Macs to enable them to read the long file names (see: http://www.tempel.org/joliet/). Unix/Linux computers will most likely be able to see only the truncated DOS-standard file names.
Macintosh HFS	Macintosh	Usual MacOS filename limitations	
Rock Ridge	Unix	Supports very long Unix file names	