

Installing the Zeiss LSM Image Browser Software

Douglas W. Cromey, M.S. – Cellular Imaging Core
Southwest Environmental Health Sciences Center, University of Arizona, Tucson, Arizona

To download the LSM Image Browser (software ver. 3.5) files from Zeiss

To access the files directly from Carl Zeiss Inc, follow either of these URLs:

- <http://www.zeiss.de/C12567BE0045ACF1/allBySubject/CAA2EF638EC5F0D3C1256ADF0050E2F1>
(Note: users must provide contact information before the software installation files can be downloaded from the Zeiss web site).
- ftp://lsm.zeiss.com/Public_Area/ImgBrowser3.5/ (Note: the ftp site does not require contact information).

Users should save the installation file (named **InstallImageBrowser.exe** as of 9/15/05) to a folder on their computer's hard disk drive.

System Requirements/Recommendations

The LSM Image Browser software runs on computers using the Windows 95/98/ME/NT/2000/XP operating systems. There is no Macintosh operating system version of this software (*see the end of this document for additional information*).

- Based on our experience with the software, your display resolution should be at least 1024x768 with 24bit color.
- While the software is not particularly stressful to the RAM and CPU, if you open large data files (e.g., *image stacks*) you will need to make sure the software is installed on a suitably powerful PC with adequate RAM.
- A large hard disk drive is always useful to store all the images and/or a drive to write CD-R disks for archival purposes.
- Users with Windows NT/2000/XP must have system administrator privileges to install the software.
- The LSM Image Browser software requires Microsoft DAO version 3.5 (Data Access Objects database engine) to be able to open LSM image databases. If you have Microsoft Access 97 or greater installed on your computer, you may already have the DAO software components installed.

Installation

Please do not try to install this software on the Zeiss confocal microscope!

NOTE: If you have a previous version of the LSM Image Browser software installed on your computer, go to START | SETTINGS | CONTROL PANEL | ADD/REMOVE PROGRAMS and select the LSM Image Browser. Press CHANGE/REMOVE to start uninstalling the software. Once this is completed, you may begin installing the new version. If you can't remove the software this way, then go to C:\AIM (*the default installation location*) and click on the uninstall program located there.

To install the Zeiss LSM Image Browser software

- Return to the folder where you saved the installation file.
- Double-click on the **InstallImageBrowser.exe** file to start installing the LSM Image Browser.
- There will be a welcome screen. This screen will recommend that you close any other Windows programs that are currently running. This is usually good advice. Click NEXT.
- The installation program will suggest a folder/directory where it would like to install the program. Users may choose a different directory if they wish by clicking BROWSE. Click NEXT.
- If your computer already has Microsoft Access 97 or greater installed you may uncheck the "MS DAO V3.5 (required database engine) 2755k" box in this window.
- The installation program will ask about creating backups of files. Click NEXT.

- The installation program will suggest a program manager or start menu program group. Click NEXT.
- The installation program will inform you that you are ready to install the program. Click NEXT.
- At the end of the installation, click FINISH.
- The installation program puts an icon for the LSM Image Browser software on your desktop as well as a creating a group in the START menu.

NOTE: If you chose to install the Browser without the Microsoft DAO components and the Browser does not run, you may need to reinstall the software with the DAO components.

See the handout [Zeiss LSM Image Browser Software](#) for more information on how to use the software.

Information for Macintosh Users

One of the key reasons that the LSM Image Browser software does not run on the MacOS is because Microsoft has never released a version of the Access database program for the Macintosh. The database engine for this program uses Microsoft Access.

Macintosh users can open LSM formatted image files using a plugin for **ImageJ** <<http://rsb.info.nih.gov/ij/>>. **ImageJ** is the free JAVA version of NIH Image. For more information on the plugin, see: <<http://rsb.info.nih.gov/ij/plugins/lsm-reader.html>>. The **ImageJ** plugin will open the LSM format image files and it seems to provide access to most of the database information.

In 2002 we successfully installed the LSM Image browser software on a G4 Macintosh running the OSX operating system using a combination of Virtual PC <<http://www.microsoft.com/mac/products/virtualpc/virtualpc.aspx?pid=virtualpc>> and Microsoft Windows 98. We have not tested other Macintosh/Windows operating system and hardware combinations, but there may be other combinations that will work. Software emulation is considerably slower than running "native" Macintosh programs, users with large data sets should consider purchasing a Windows PC. Information about our software emulation "experiment" is available online at: http://swehsc.pharmacy.arizona.edu/exppath/core/equip/handouts/LSM_Image_Browser_on_a_Macintosh.pdf.

Acknowledgements

Barb Carolus (*University of Arizona, ARL Biotechnology Division*) provided editorial assistance with this handout.

About the author

Mr. Cromey is the manager of the Cellular Imaging Core, a service that provides training & technical expertise to SWEHSC investigators interested in using microscopy and scientific imaging in their research. The SWEHSC is funded by the NIEHS, grant # ES06694. The Cellular Imaging Core is also host to *Microscopy & Imaging Resources on the WWW*, located at: <http://swehsc.pharmacy.arizona.edu/exppath/>

Originally written: 9/06/2002 Revised for LSM Image Browser version 3.5: 9/15/2005

