# UF | ICBR Cytometry

University of Florida, Interdisciplinary Center for Biotechnology Research
(https://biotech.ufl.edu)

# CTAC ICBR SOP: Saving your Work Using the Leica TCS SP5 Confocal Microscope System

**Materials Required:**

LCS software

Computer

Leica TCS SP5 Confocal Microscope

**Purpose:**

To facilitate use of the controls enabling saving of images and data on the Leica TCS SP5 Confocal Microscope.
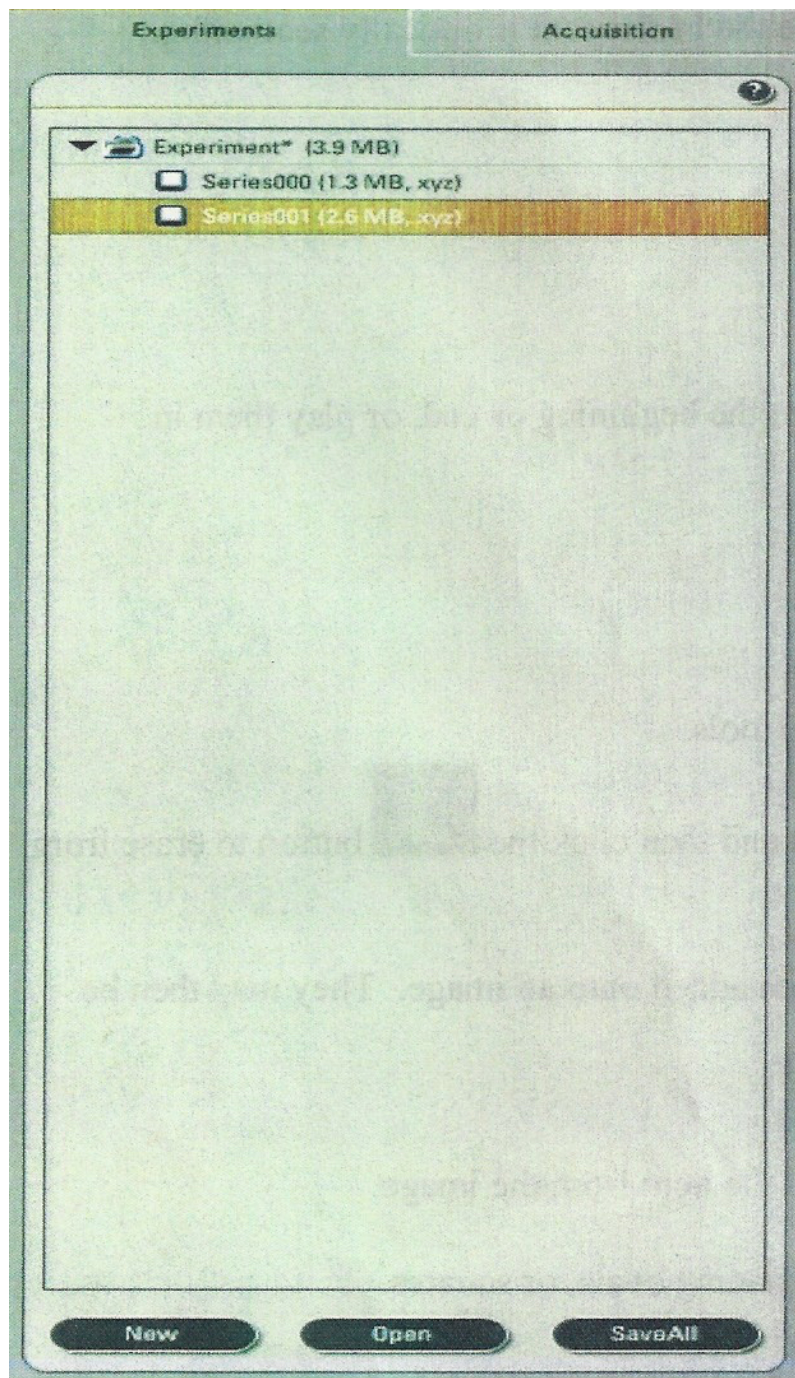
**Saving Files**

The images in the experiment window are **temporary**.  A power surge or computer crash could cause you to lose your data.  It is strongly suggested that you SAVE YOUR WORK FREQUENTLY!  **Files should be saved to the Hard Drive as Leica files and also exported as TIFF files after every session**.  The TIFF images can be copied and taken with you on a portable flash drive.

**IMPORTANT: ALL FILES LEFT ON THE HARD DRIVE WILL BE DELETED AFTER ONE WEEK!**

The following instructions will allow the user to save experiments, data stacks and screen captures. At the end of the document there are instructions on how to burn this data to a CD using additional software.

1. Open "Experiments" window.

1. Right click on "**Experiment**" and choose "**Save Experiment As**".

2. A "**Save As**" box will open.

3. Open the drop-down box and select "**D:**" drive.

4. If you do not have a folder, click on "**New Folder**" icon and create one in your name.

5. Double click on your folder so that it appears next to "**Save In**".

6. Next to "**file name**" type in identifying information for your particular experiment. **Note**: you will have to create a new subfolder for each slide or experiment in order to keep your data organized.

7. Click "**Save**".

8. You must also export your file as a **TIFF** file in order to open it in other software (Adobe, Apple, Microsoft products). Right click on your experiment name, choose export experiment, then export as a TIFF image. Save the TIFF images in your folder along with the Leica files.

**Saving Max Projections, Overlays, Etc.**

When you do a stack your "**series**" is automatically placed in the Experiment folder or under your assigned file name in the "**Experiments**" window.

To rename the series right click on the series, and choose "**rename series**".  You may then type in your desired name.

**IMPORTANT:  Any max projection, overlays or images with annotations MUST be saved individually.**

1. Click on the image that you wish to save. The box around it should be highlighted.
2. Double click on the image to make it full screen size.
3. This is the time to add any annotations to the image using the tool buttons.
4. Right click on the image and choose "**snapshot**".
5. A file named "**snapshot**" will be placed in your experiment folder.
6. Rename the file by right clicking on it. Choose "**Rename snapshot**" and rename it.

**Snapshot All**

To use Snapshot All, right click on the highlighted image on the screen, and then choose "**Snapshot All**".  This will save whatever is on the screen at the time, regardless of what is being highlighted.  This is useful if you want to save tiled images or the whole gallery in one picture.

**IMPORTANT:** Nothing that is placed in your Experiment file is saved permanently **UNTIL** you tell the software to save it.  You can save the entire file by right clicking on the experiment file and choosing "**Save As**".  Remember that any additional images captured after the initial save process will **ALSO** have to be saved.  You can do this by clicking the "**Save All**" button in the Experiment window. Finally, you must right click on the experiment name and export the file as a **TIFF** before your session is finished.

To start a new experiment, click on the "**New**" button at the bottom of the Experiment window.  NOTE: It is advisable that you don not put a large number of experiments in one file as several series with their accompanying snapshots can be confusing.

**Saving to a CD (Compact Disk)**



1. Open NeroStartSmart by clicking on the icon.
2. Choose "**Make Data CD**"
3. Click "**Add**"

4. Select File or Folder to copy

5. Click "**Add**"

6. Click "**Finished**".

7. Click "**Next**".

8. Click "**Next**".

9. Click "**Burn**".

**IMPORTANT:  When you are finished return the Argon laser power to 0% and clean the objectives used with clean lens tissue paper.**