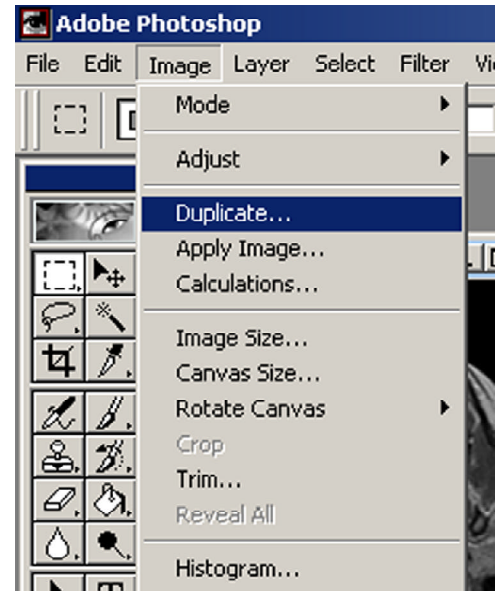


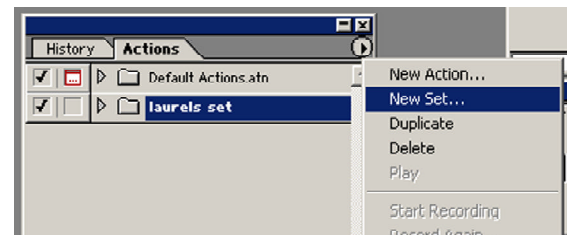
Creating an *Action* to Process Confocal Images

When you have a bunch of images from Confocal Assistant or similar software, you probably want to put them all together into one image, with many layers, yet still be able to see through the layers a bit. This is a lot of work to do one by one, so here is a way to do it quickly and easily. This tutorial assumes you are already relatively acquainted with Photoshop and creating and using actions. If you don't know how to make an action, you might also find our tutorial on creating Actions useful.

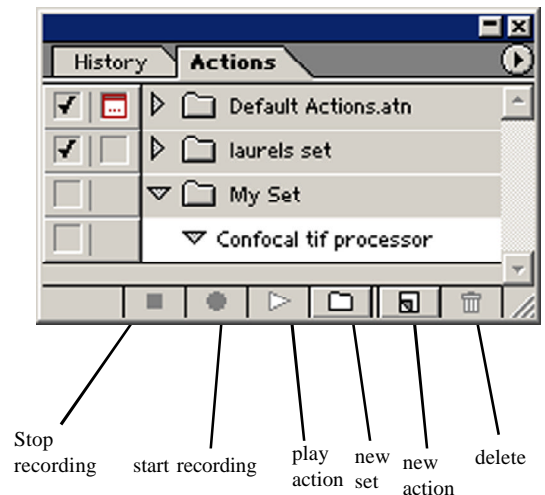
First, you need a folder full of TIF images. In Photoshop, open the first image in the sequence. Then, under the *Image* menu, choose “duplicate,” and click ok for the window that appears. You now have two images, one a copy of the other. They will have titles like mri0000.tif and mri0000 copy. Go back to the original image.



Now go to the *Actions* palette. Click on the arrow in the upper right-hand corner and select “New Set” from the drop down menu. Enter a name. After that, go to the menu again, and select “New Action”. You can call it what you like, maybe “confocal tif processor” or something.

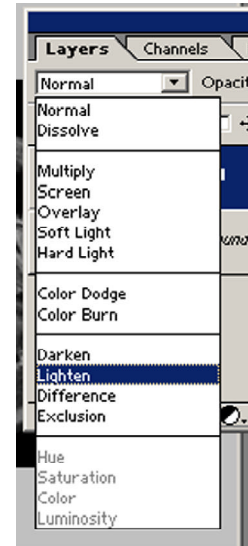


Remember that your new action will want to begin recording immediately, and you can control that with the toolbar at the bottom of the *Actions* palette.



Assuming you do want to keep recording, under the *Select* menu, choose “Select All.” Then, under the *Edit* menu, choose “Copy.” After that, close the image (by choosing “Close” from the *File* menu). Now, the only image left open should be the copy image. Under the *Edit* menu again, choose “Paste.” This will paste one image on top of the other one. These two happen to be the same image, but it’s ok since the action will put all the images in your folder on top of each other.

Then go to the Layers palette. Make sure you have the top layer selected, then click on the arrow next to the box where it says “Normal” and choose “Lighten” from the drop down list. This will allow each layer to be transparent in a way that will show the layers underneath.



Now, in the *Actions* palette, stop recording. This is all there is to your action. Now, when you want to run your action, **it is very important that you open the first image in your sequence, and create a duplicate of it before you use your action.** If you forget to do that, the action won’t work.

So now to use your action, close the copy image and don’t save it. Next, under the *File* menu, select “Automate” and then “Batch.”

You’ll next get a window that looks something like this. It should already have the action and set selected for you, if not, just select them from the drop down boxes. The “Source” should be “Folder,” and where it says “Choose,” you should choose the folder where your images are. The “Destination” should be “None.”

Once everything is set, click Ok. The action should proceed. Depending on how many images you have (and how good your computer is), the process can take a while. But when it’s finished, you’ll have an image with many layers. You can then either save this as a multi-layer Photoshop file, or you can flatten the layers (Under the *Layers* menu, choose “Flatten Image.” If the action doesn’t work, make sure you followed all the steps properly.

