

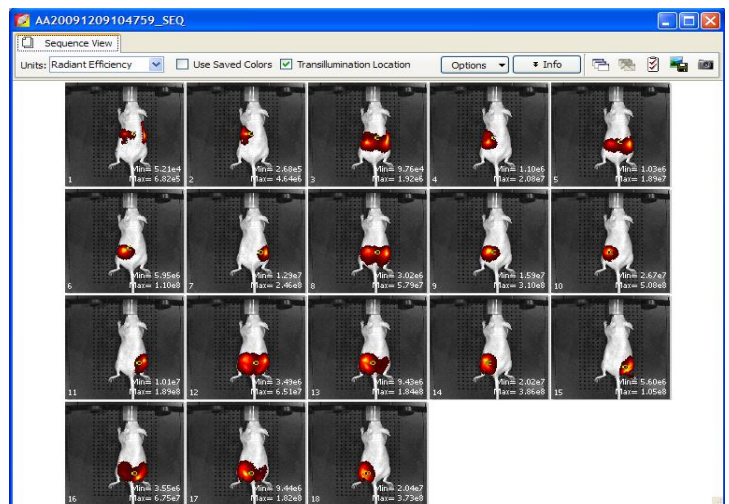
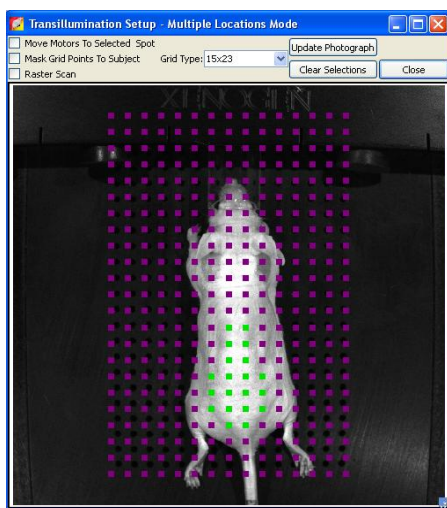


# Transillumination Fluorescence - Raster Scan

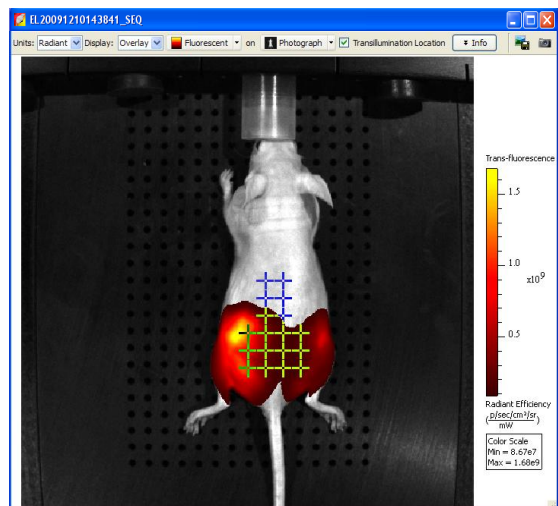
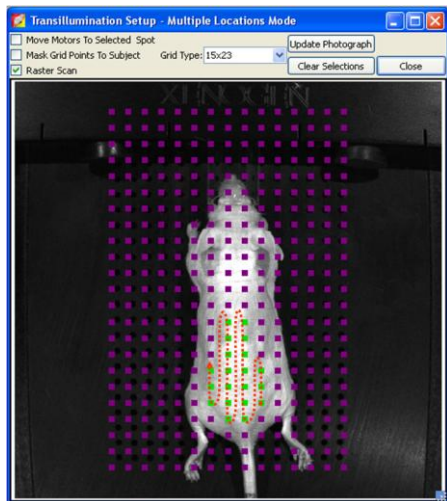
In order to facilitate faster transillumination imaging, with Living Image 4, we have incorporated raster scanning capabilities. With raster scanning, the shutter remains open as the transillumination excitation source moves underneath the animal. This results in a single image and faster imaging times.

**Note:** This Transillumination Fluorescence – Raster Scan Tech Note was designed as a supplement to **Transillumination Fluorescence Tech Note 14a**. For information about setup of your 2D transillumination fluorescence sequences, please first consult that tech note.

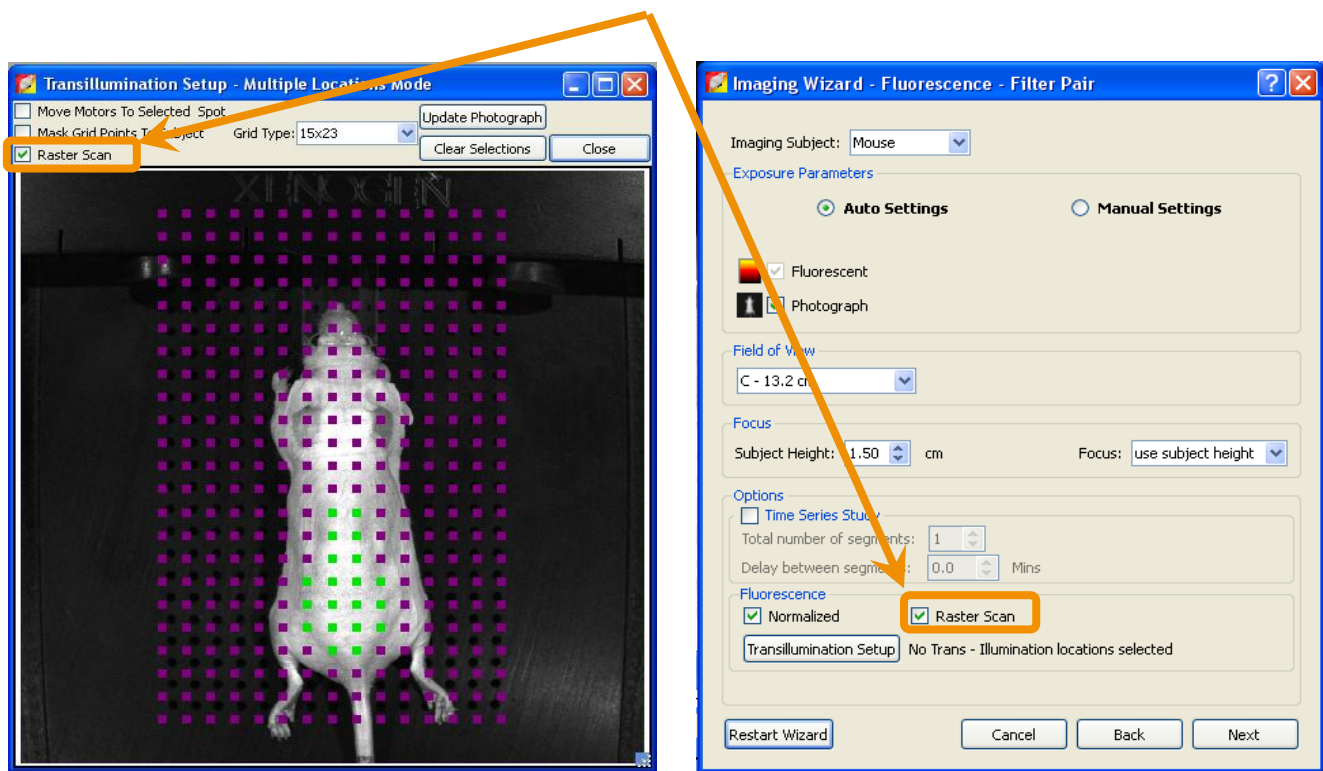
With traditional transillumination imaging, points are selected on the mouse corresponding to excitation positions below the mouse. EACH point resulted in an image.



With transillumination raster scans, the shutter remains open as the source moves from point to point. This results in one image as seen below and saves the user time. Whole mouse imaging times are now in the range of 2-5 minutes depending on the intensity of your probe.



To perform Transillumination Raster Scan, set up your transillumination sequence (for more information on this topic please see the **Transillumination Fluorescence Tech Note 14a**) by selecting the points you would like to image in the animal. Select **Raster** either in the **Transillumination Setup Window** when setting up a manual sequence or in the final screen of the **Imaging Wizard** when using wizard setup. This is a default setting in most software versions and it is recommended to use this feature when performing 2D transillumination fluorescence.



**Final Note:** Raster scanning cannot be used in conjunction with Fluorescence Imaging Tomography (FLIT – 3D) as we require spatial information that is only provided when we image at multiple points underneath the animal. For information on setup of sequences for Fluorescence Tomography, please see **Tech Notes 6a-c**.