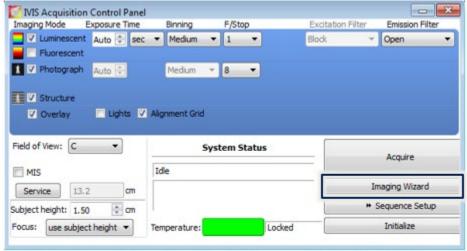


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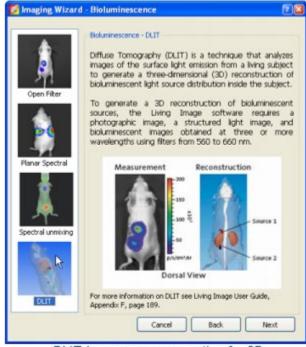
## 3D Bioluminescence Imaging (IVIS Spectrum)



IVIS Spectrum control panel provides the image acquisition functions The Imaging Wizard button is used to set up a DLIT sequence for 3D luminescence imaging.

## **Image Setup**

- 1. Initialize Living Image Software.
- 2. Wait until camera temperature box turns green (~ 7 min). The default temperature is 37°C
- Open chamber and make sure black plastic mat is in place or use a sheet of black Artagain paper instead.
- 4. Block off all but one port in the IVIS anesthesia manifold inside imaging chamber.
- 5. Set up DLIT (Diffuse Luminescence Imaging Tomography) sequence using the imaging wizard. (Restart wizard if necessary.)
  - a. Choose Bioluminescence; Next.
  - b. Choose DLIT; Next
  - c. Choose type of bioluminescence (probably firefly)
  - d. Imaging subject > Mouse (Do not check MIS)
  - e. Choose field of view
- 6. Set everything else as default.



DLIT Image sequence option for 3D bioluminescence imaging

## **Image Acquisition**

- 1. Induce mouse in anesthesia box
- 2. Inject mouse with luciferin.
- 3. Start timer if you are comparing mice.
- 4. Direct anesthesia flow to imaging chamber and organize mouse with nose in anesthesia tube. Wait ~5 min. (Note that if you are comparing mice, this timing must be the same between animals.)
- 5. Acquire sequence.