

FRET Calculations in Elements 3.0

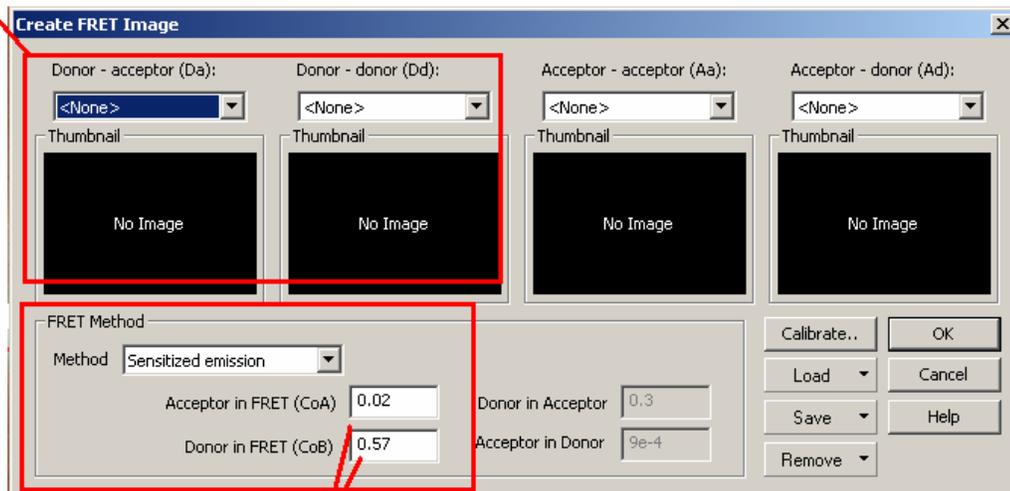
This summary demonstrates how to calculate FRET crosstalk between samples and how to apply these corrections to a recently acquired FRET sample.

Calculation

1. Calibrate FRET Images using samples loaded ONLY with Donor and then ONLY with Acceptor.

2. Open the “Create FRET Image” Window:

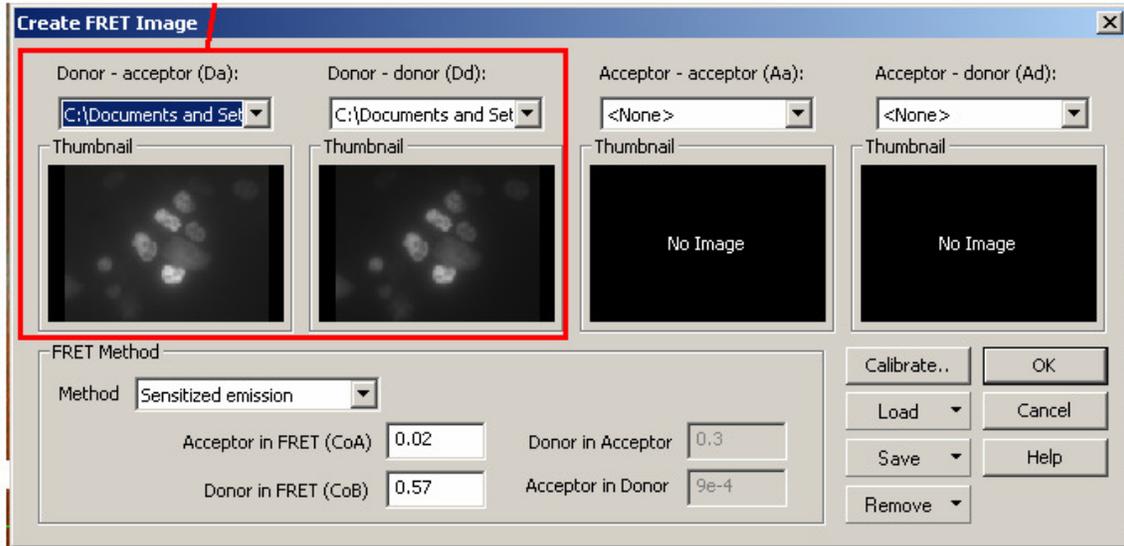
The 2-Image Acquisition Method requires ONLY the CFP-YFP and YFP-YFP image sets.



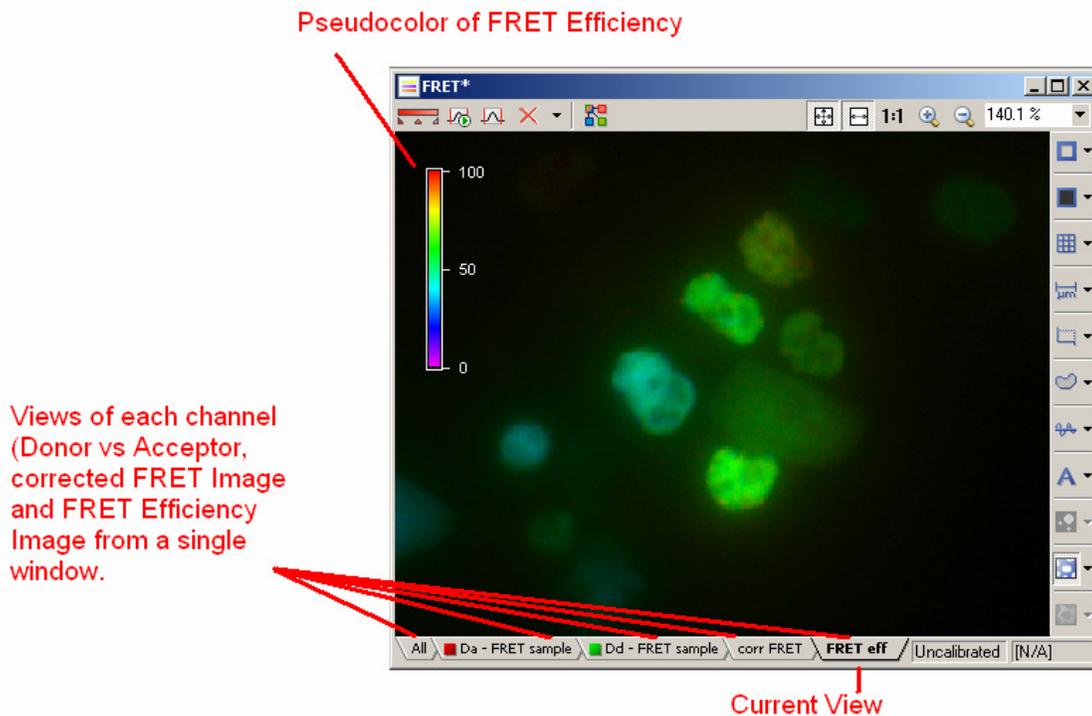
Note this calibration is saved and is performed by TI during the training on the instrument.

3. Load Sequences of acquired data (can be single images, time-lapse image sets or 3-D image stacks).

2 Images Loaded - No other settings to adjust



3: View FRET Image



4. Example of image sequence with dropping FRET efficiency. Change in FRET is graphed using Time Measurement:

