EpacVV: Whole-Experiment/Project based Automatic FRET/FRAP/lambda Scan Analysis of XYZCT Assemblies

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Stage 0: Parameter Entry

Answer/Update ~300 short questions in a script dictating what to do.

Stage 1: File Entry

100% Automatic.

Stage 2: File Processing

Semi-automatic with human interaction squezzed into very short time window.

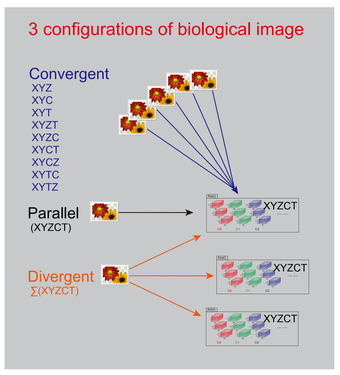
Crash-Resumable

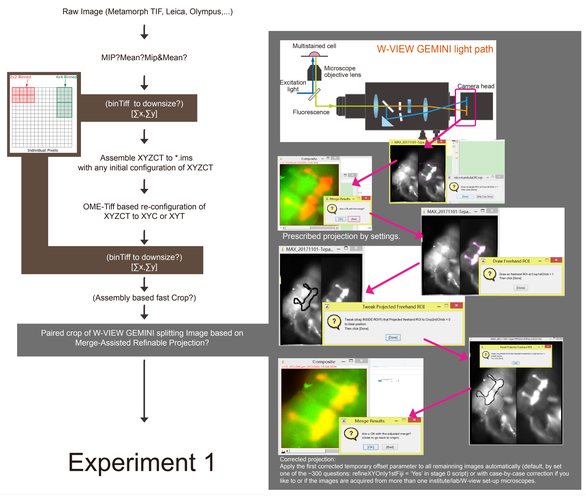
Stage 3: Plot and Data Export

100% Automatic
Highly customoized.
(Re-)runnable within seconds.
Stand-alone.

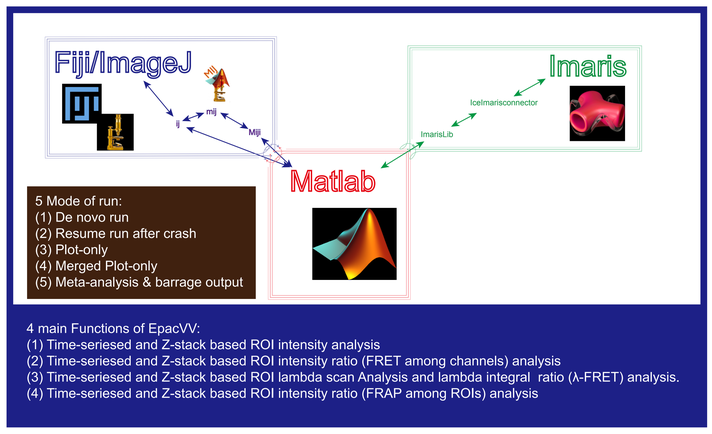
Features of plot: (by manipulating aMasterOmniCell in Mode 3/4 with ease)

- •Plot any subset of timepoints with unlimited possibility:
  (1)Push the subset uniform&compact, or
  (2)Keep their original positions by linking nearby datapoints covering gap.
- •Plot any sub-group(s) of choice.
- •Skip any curve(s) of choice.
- •Re-assign any curve(s) to any group(s).
- •Customized time drift correction of any curve(s) of choice.
- •Combine any data(aMasterOmniCell) from different experiments/days/person.
- •PlotSaturation: Finally generate plots with all combinations of major visibility set-tings in a barrage.

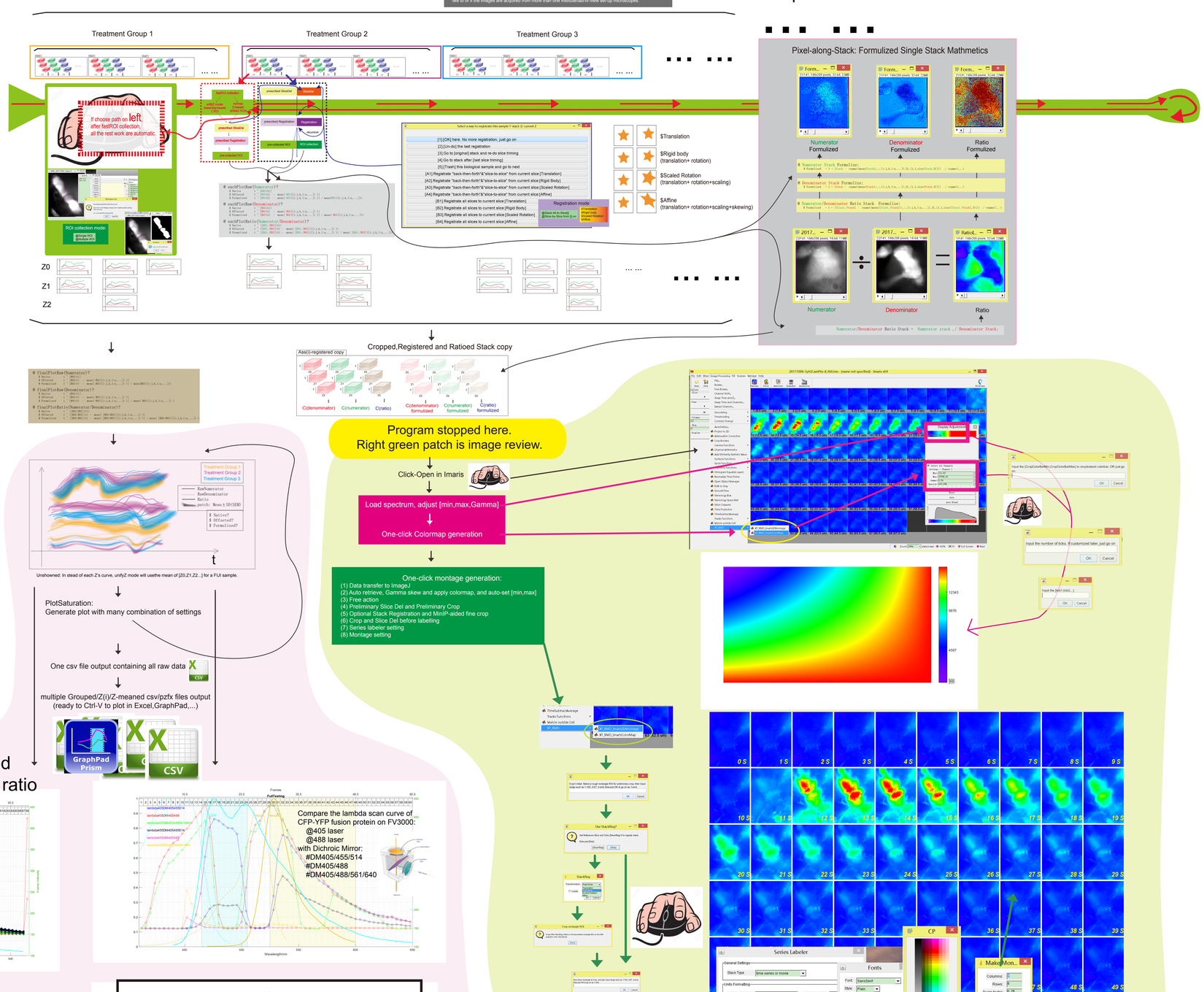




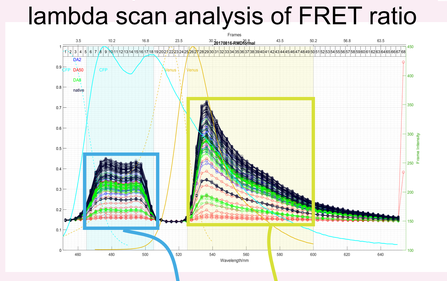
Experiment 1

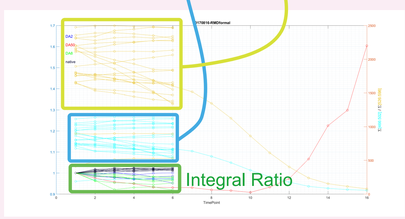


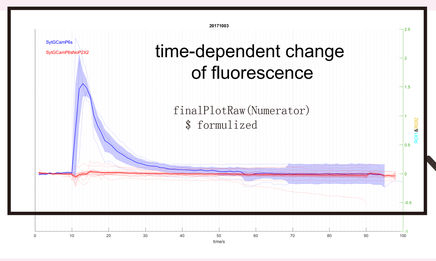
Experiment 2...

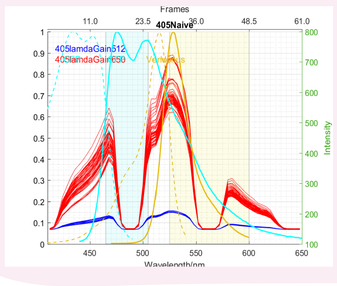


time-lapse and Z-stack based lambda scan analysis of FRET ratio

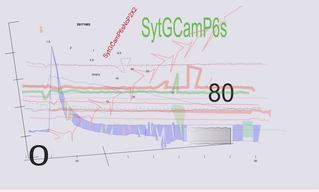






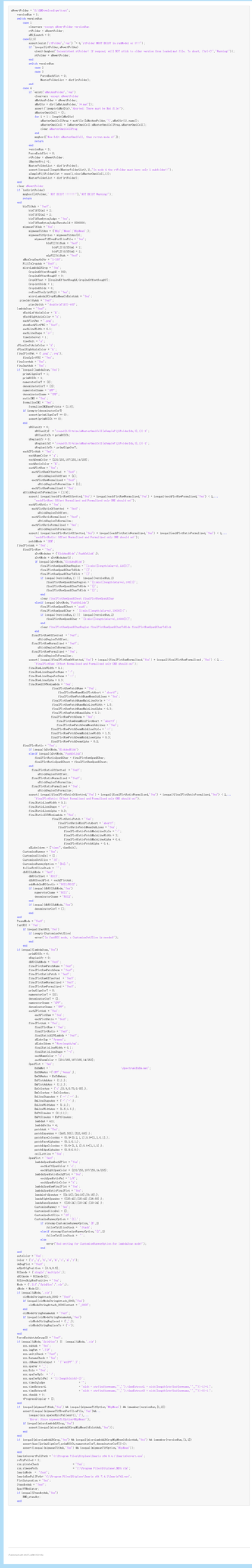


Scalable Vector Graphics (SVG)
Each element is editable in Adobe Illustrator.



Stage 4: Meta analysis and barrage output. 100% Automatic.

(1) Barrage output with any/all possible configurations.
(2) Meta-analysis of all data:
  1>Unlimited Crop sub-region(s);
  2>Unlimited Cross-regional analysis;
  3>Bifurcate each group as succeed/failed samples;

Stage 0: Parameter Entry

(outdated)