# FV10i software

Menu with detail walkthrough

FV10i software startup

- Press and release power button on front of the 10i
  - BEFORE turning on: Left button red, right button off
  - Warming Up: Left button green blink , right button solid red
  - Ready to start: Left button green steady
- Log in to the "Confocal User" account, there is No PWD

- Double click the icon on the desktop to launch the software.
  - The main unit warms up for the first three minutes after being turned on. Do not activate the software during this period.
- Enter [User ID] and [Password], and then click the <OK> button.
- This software launches and the two Fluoview windows appear

Tool Bar (list of Tabs)
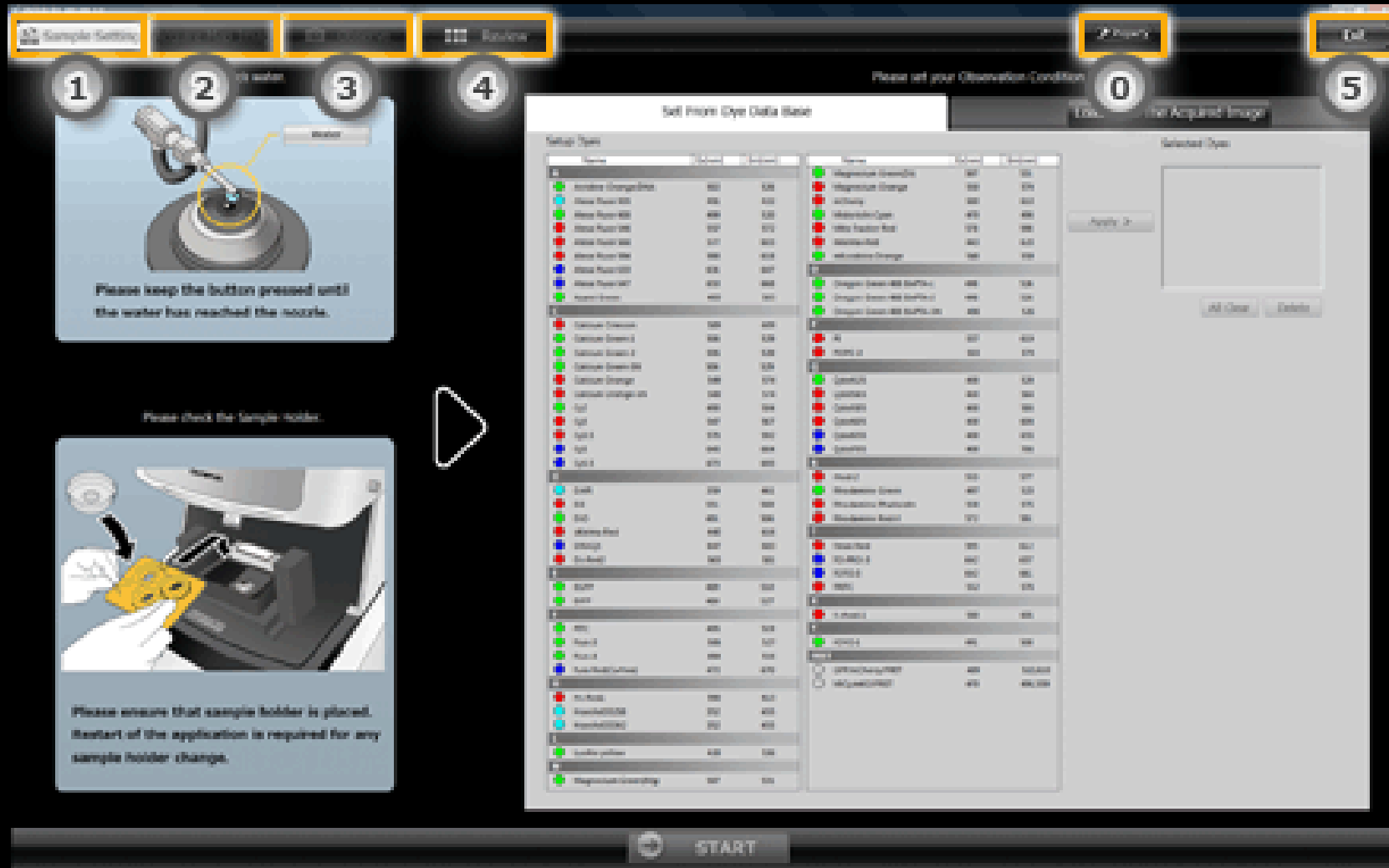
1. Sample Setting
   Fluorophore selection
2. Acquire Map Image
   Overview of sample
3. Observe
   Actual scanning
4. Review
   Examine in FV explorer
5. Exit
   Quit the program

0-Property-
   ADVANCED USE ONLY

These settings effect all of the users on your lab account!

Observe
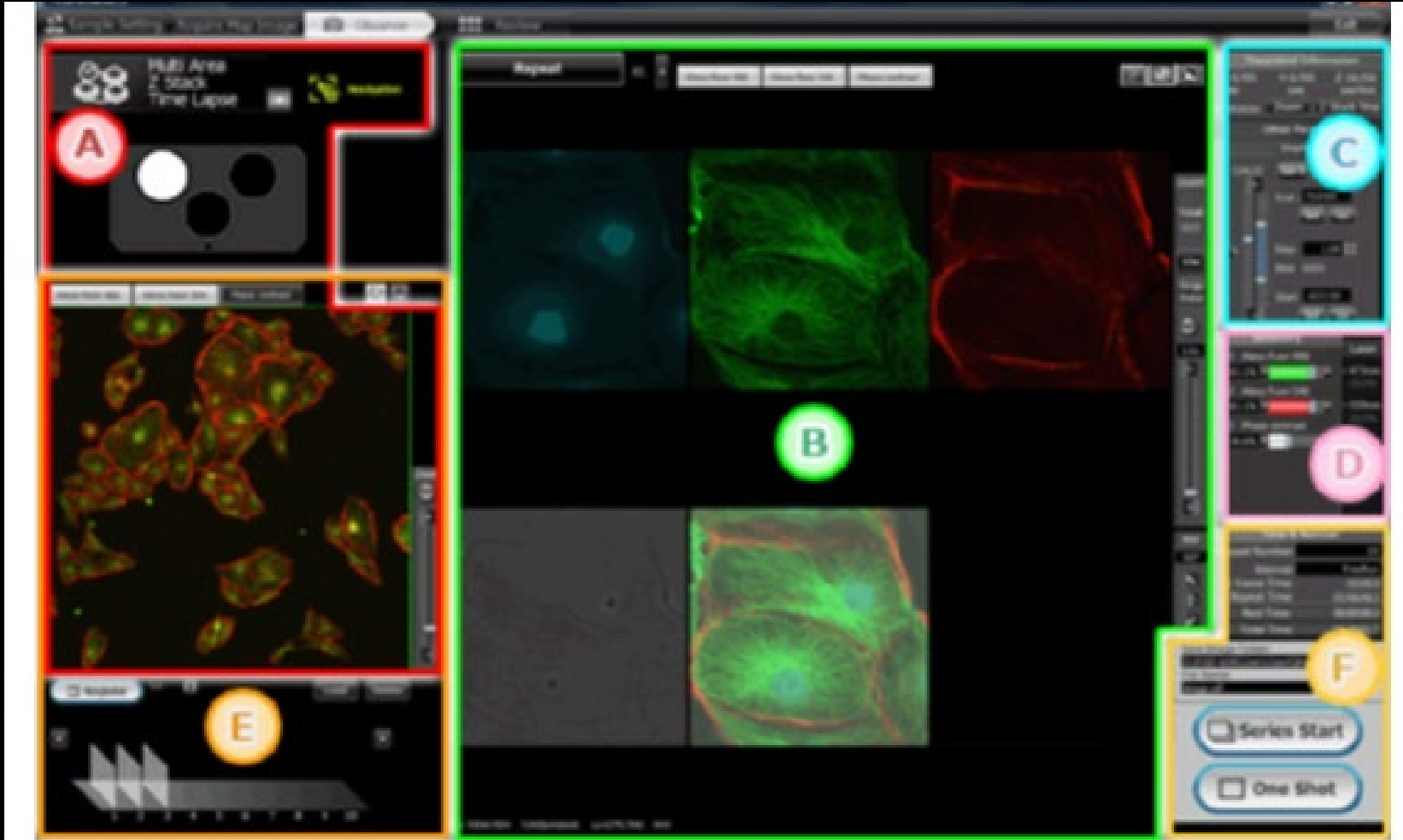
A. Image Acq Mode Setting
B. Live View display
C. Setting various parameters of scan
D. Channel sensitivity and laser intensity
E. Registering image acq points
F. Starting the acq.

Observe A
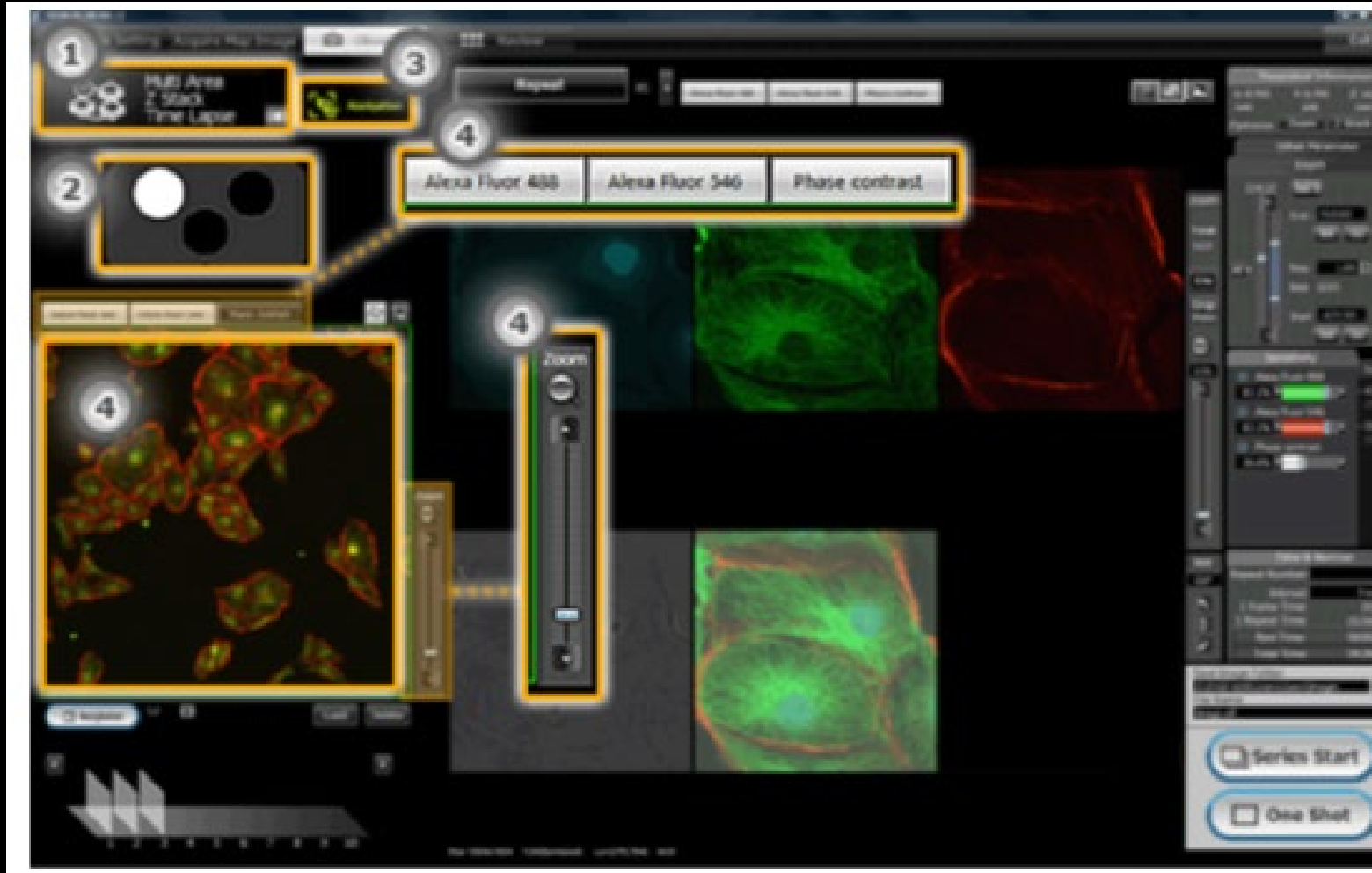
1. Image Acq Mode
2. Select Bin
3. Navigation- step by step walkthrough
4. Show or hide map image channels
4. Map Image of active channels
4. Zoom (of map image)

Observe B

Repeat-start scanning (Peach when active)

Individual channels (toggle on and off)

Subscan, split channels, LUT adjust

Zoom changes mag with slider (lens with button)

Rotation

Information at the bottom of the image windows with Image size, pixel resolution, X and Y coordinates and intensity

Observe C

Theoretical Information:\size of pixels in X, Y and Z (thickness of optical slice)
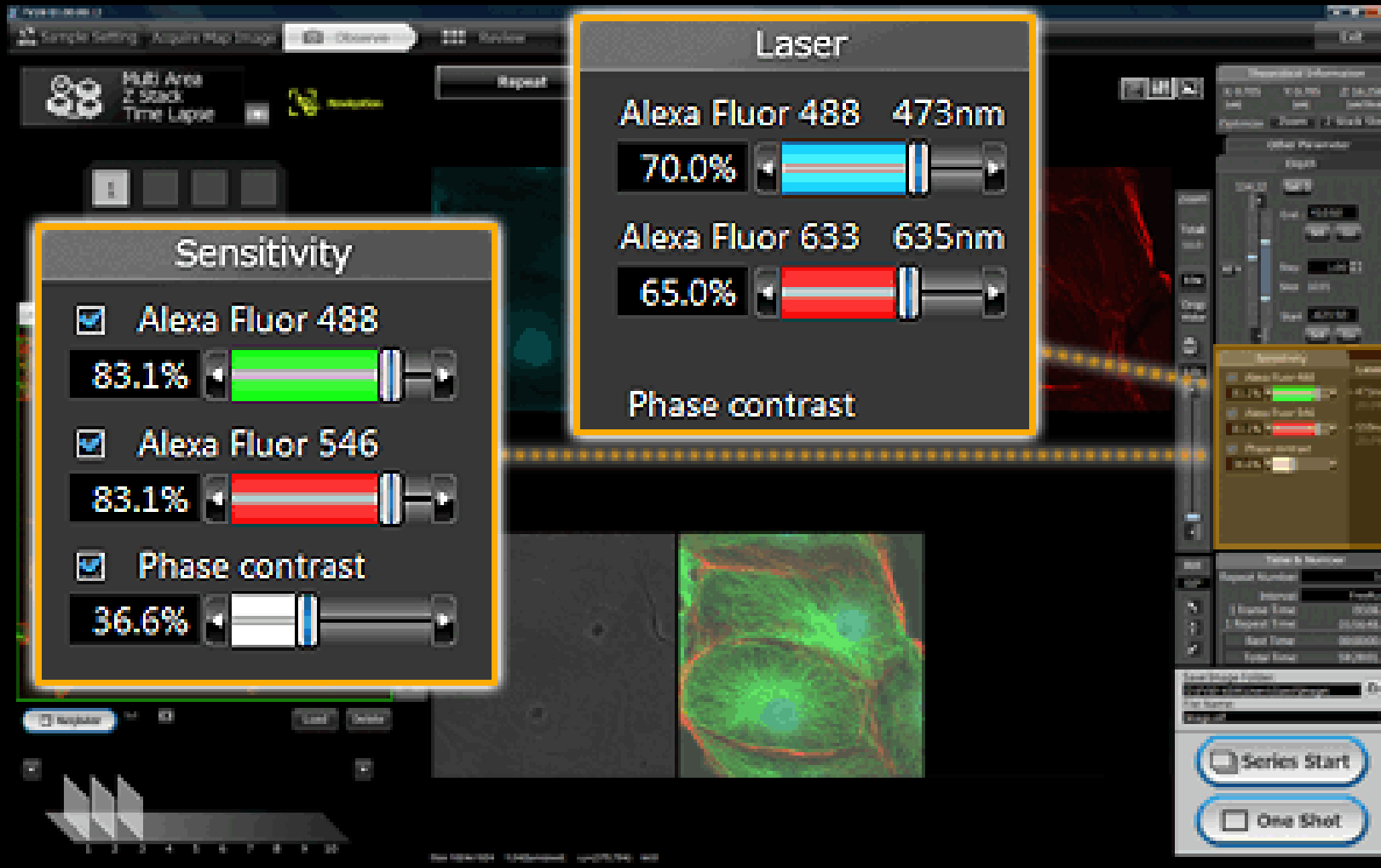
Optimize
  zoom: Nyquist for X/Y
  Z stack: Nyquist for Z

Depth- Z location of the stage, mark points and step size for Z scanning

Other Parameter
- image size
- Averaging
- Confocal Aperture (pinhole) size in airy units
- Cross Talk Correction: sequential scanning to minimize bleed through of signals

Observe D

Sensitivity-For a fluorescence channel, the detector sensitivity (voltage applied to the photomultiplier) is adjusted. When at 50%, it corresponds to 625V. For a phase contrast channel, the target intensity value is adjusted. When this field is set to 50%, it corresponds to a target intensity value of 2048.

Laser
Percent of maximum laser power per laser
When more than two channels are active the laser must be highlighted to redraw that channel in focus mode.

Observe F

Z: [Number of slices for which images have already been acquired] / [Number of all slices in Z Stack]

A: [Number of areas for which images have already been acquired] / [Number of all areas in Multi Area]

R: [Number of repeats of image acquisition already completed] / [Total number of repeats for Time Lapse]

Save Image Folder: autosave path for images (should be your lab and subfolder)

File name: autoincremented base file name will have 01 added to second capture

One shot: captures a single z plane, timepoint area with whatever channels are active

Data File Management

Copy Data from your user folder in WINDOWS explore by selecting the .oif and .oif.files folder

(eg notrash was the name of the acquisition. Notrash.oif is a small 14kB file that will launch the full resolution version of the files stored in notrash.oif.files (folder exploded at right)

If you copy only the .oif file from Fluoview explorer, you will have a low res thumbnail only
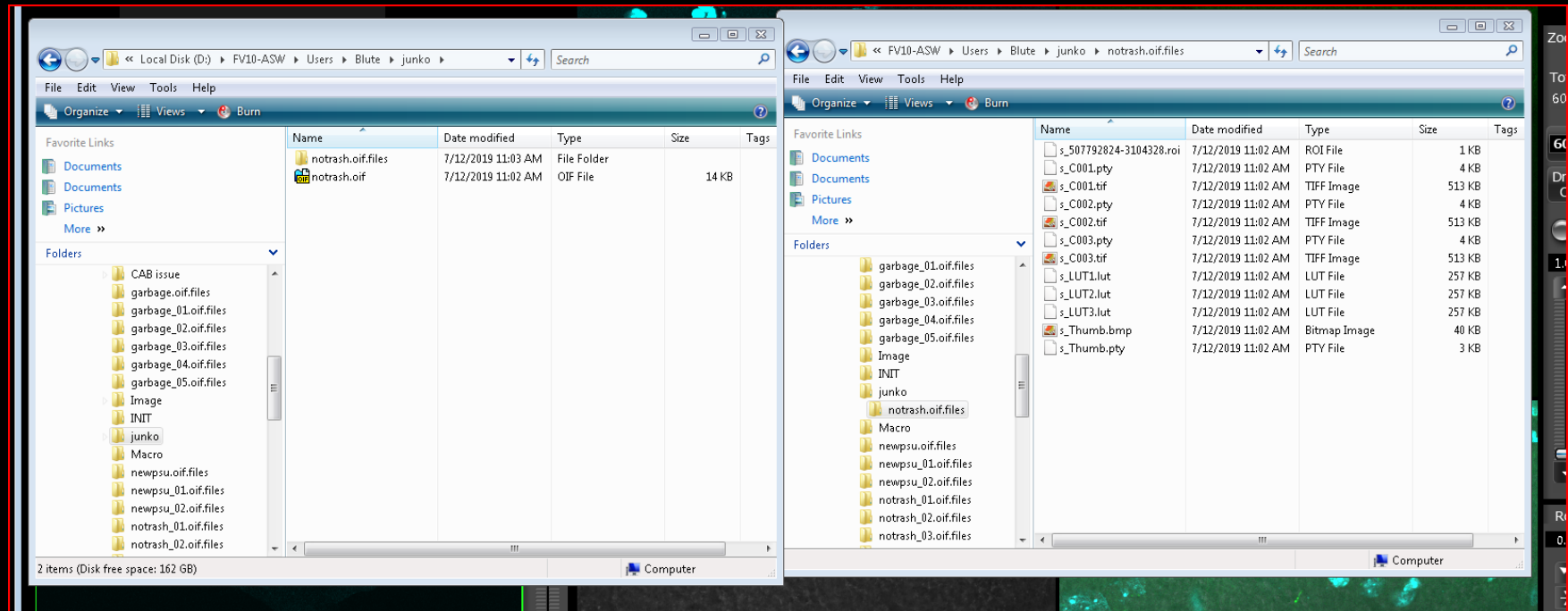
notrash3
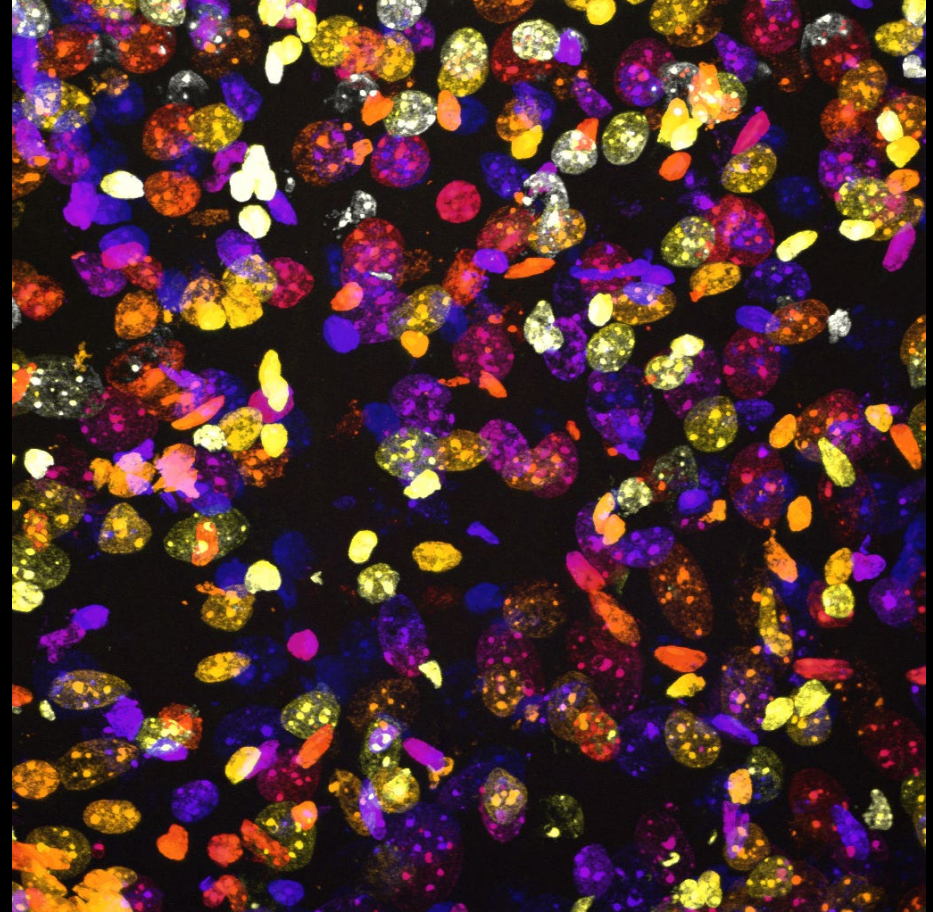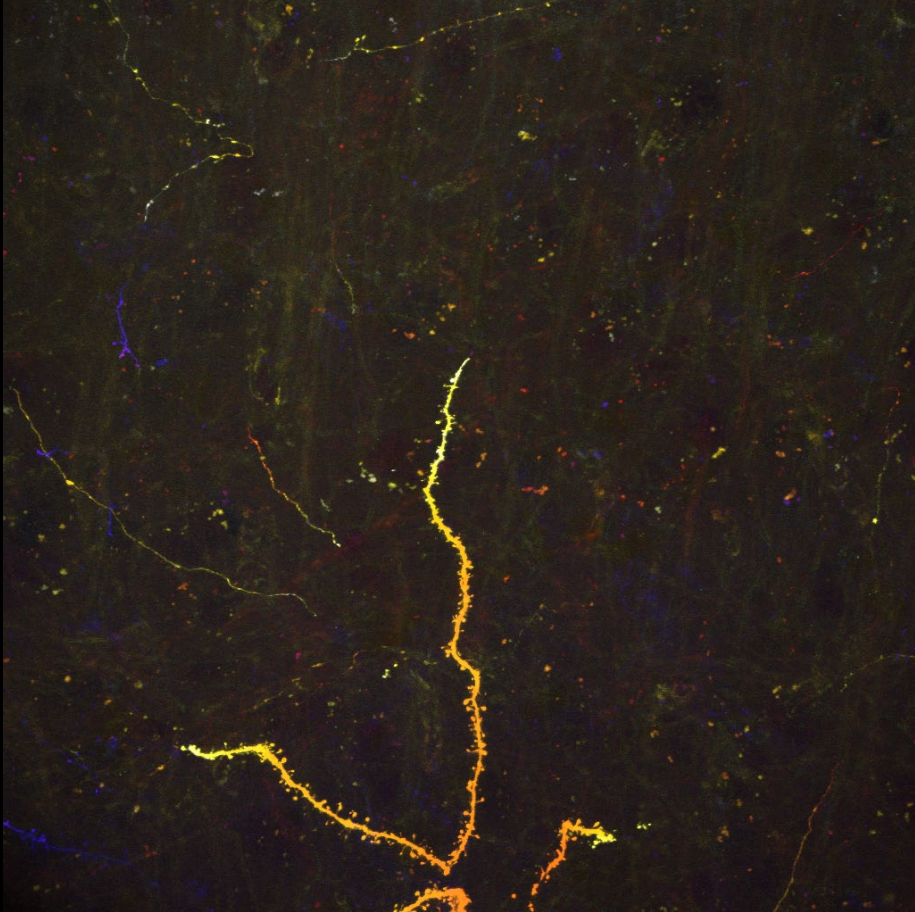
notrash3

(Fiji Is Just) ImageJ 2.0.0-rc-68/1.52i; Java 1.8.0_66 [64-bit]; Windows 10 10.0; 364MB of 18178MB (2%)

Title: notrash_03.oif
Width: 212.1333 microns (1024)
Height: 212.1333 microns (1024)
Size: 44MB
Resolution: 4.8272 pixels per micron
Voxel size: 0.2072x0.2072x0.799 micron^3
ID: -5
Bits per pixel: 16 (unsigned)
Display range: 307 - 4079
Frame: 8/22 (c:1/3 z:8/22 - Series 1)
Frame interval: 1 sec
No threshold
Magnification: 0.50
ScaleToFit: false
Uncalibrated