

Imaging Facility
Biotechnology Resource Center
Cornell University
BRC\_Imaging@cornell.edu

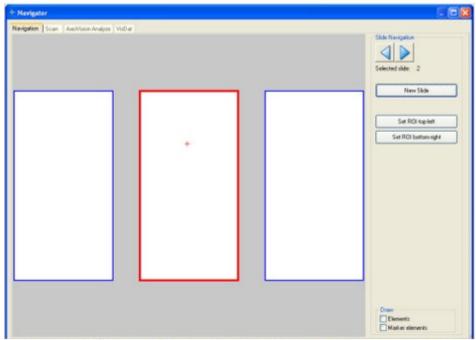
# Overview/Tile Scan with PALM Navigator (LCM)

# Starting the PALM Navigator

1. Click on "Navigator Window" in the "View" menu, the Navigator icon in the tool bar, or press the function key F4.



2. The "Navigator" window opens.

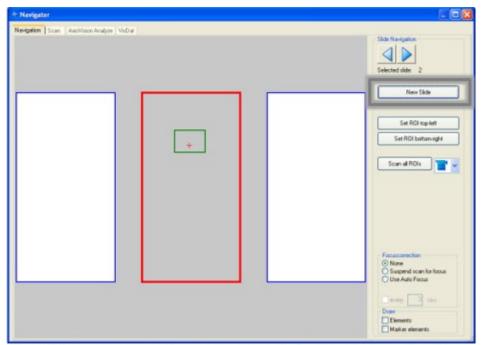


The Navigator tab on the Navigator window contains an image of your slide holder (3x1.0 slide holder can hold three slides); slide 2 is currently selected here. The red cross indicates the current position of the stage.

- 3. Click on an area of the slide containing your sample.
- 4. Choose magnification. Focus sample.

### Specify Scan Area

- 1. Using the mouse, drag a rectangle over the image of the slide that covers the area you want to scan.
- 2. Click on the New Slide button at the right side of the Navigator window if you want to start over or delete an image already displayed.



Specifying scan area: the rectangle selected is displayed on the image of the slide. Clicking the New Slide button deletes the selected scan area.

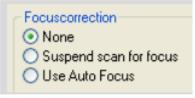
- 3. If only a very small area is to be scanned:
  - a. Move the stage such that the top left corner of the area to be scanned is displayed in the middle of the monitor.
  - b. Click on the "Set ROI-top-left" button located at the right side of the Navigator window.



Navigator option to set a small ROI scan area

- c. Move the stage such that the bottom right corner of the area to be scanned is displayed in the middle of the monitor.
- d. Click on the "Set ROI bottom-right" button.

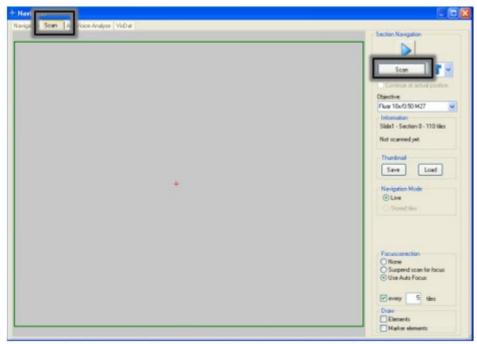
- e. The rectangle selected is displayed on the image of the slide.
- 4. You can choose to adjust focus for each scanned section: automatically (not available), manually, or not at all. Set the focus correction type on the "Navigation" and "Scan" tabs.
  - a. Select "None" if you do not want any focus correction during the scan.
  - b. Select "Suspend scan for focus" if you want to manually readjust the focus for each section scanned. This option will get a far sharper overall result, but the duration of the scanning process will increase considerably.



Navigator option to set focus correction during scan

# Scanning

- 1. Select the Scan tab. Check that the objective displayed corresponds to the objective you are using.
- 2. Click the Scan button to begin scanning.



Scan tab: The selected area is scanned section-by-section (or by tile) and the progress of scan can be followed in this window.

3. While a scan is in progress, the "Stop Scan" button appears instead of "Scan". You can

use this to interrupt the scan. Select the "Continue at actual position" checkbox. (The "Continue" button appears instead of "Scan"). You can then continue the scan from the point at which you interrupted it.

- 4. You can save the scan displayed in the Navigator window, either the overview image only or the overview image and the individual tiles.
  - a. On the "Scan" tab, click on the "Save" button.
  - b. Click on "Yes" if you want to save the individual tiles in addition to the overview image. Click on "No" if you only want to save the overview image.

#### **NOTE:**

The overview image of the scan has a maximum resolution of 900 x 900 pixels; this is significantly lower than the resolution of the individual tiles.