% Beta Cell Detector Based on LIPSvM % % -----

* LIPSyM : Localized Isotropic Phase Symmetry Measure

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HOW TO RUN:

1. In your matlab terminal go to this folder

execute command - BetaCellDetector

INSTRUCTIONS FOR USE:

1. Step 1 is to do the data processing. In this step you ca only adjust the cell size. 16 pixels is kept to be default for these images.

It is possible to select multiple images. Processing for each image takes about 2min. You may like to run this step over night.

This step would produce .mat files in the data folder by the same name as image file names.

2. Next step is to view result and tune the DAB threshold parameter. The input to this step is all the .mat files produced in the last step.

It is possible to do multi-file select here.

- 3. You may use the "next" and "prev" buttons to navigate through the results.
- 4. You can change the threshold to see the results of it.
- 5. If you feel the results are not satisfactory, you have an option to mannualy alter the results. This can be done by use of "Edit Result"

panel. You can add single cells. Remove cells one by one and also in bulk. Use the "Esc" key on your keyboard to exit the mode.

6.In bulk, means that you can use the polygon tool to select a region which is to be eliminated. Double click to complete the polygon.

- 7. Press the button "Show Final Result" to re-render the screen to show the currently marked cells.
- 8. The beta cell count is indicated at the bottom right of the window.
- 9. You can use the zoom-in/out tools as usual.
- 10. You can use File->Save (or Ctrl+S) to save the result. This operation shall save the co-ordinates of cells and the parameters (DAB Threshold, cell count)
- in a file in the same folder where the .mat file were kept.

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