Quantification of nucleolar fluorescence

1. Detection and demarcation of nucleoli
   - Identification with nuclear marker
     - DAPI
     - Pol II
     - DAPI and Pol II
     - Detect dark holes
     - Detect dark holes
     - Add plus
     - Detect dark holes
     - Method 1
     - Method 2
   - Identification with probe image
     - Dim nucleoli
     - Bright nucleoli
     - Detect dark holes
     - Detect light holes
     - Method 3
     - Method 4

2. Reduction of noise and false positives
   - Median filter or Erode/Dilate
   - Filters

3. Segmentation and quantification of fluorescent signals
   - Statistical correction combined with software modules
   - (i.e. multi wavelength cell scoring module)