

# “A segmentation method for images with subjective contours applied to immunohistochemistry-stained cell membranes”

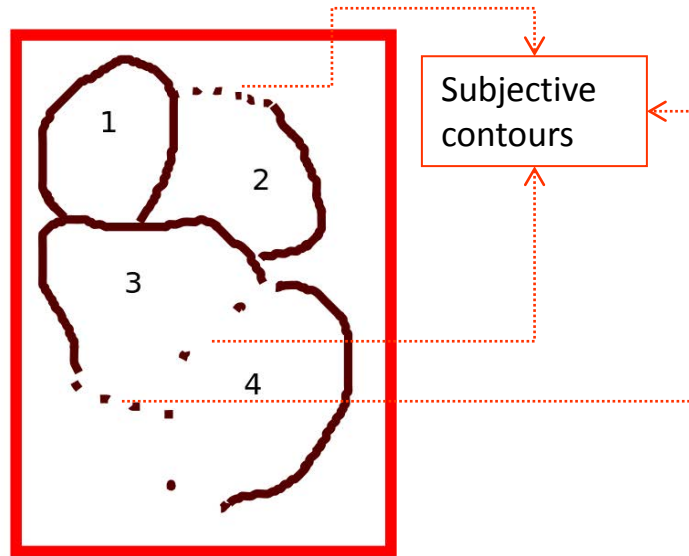
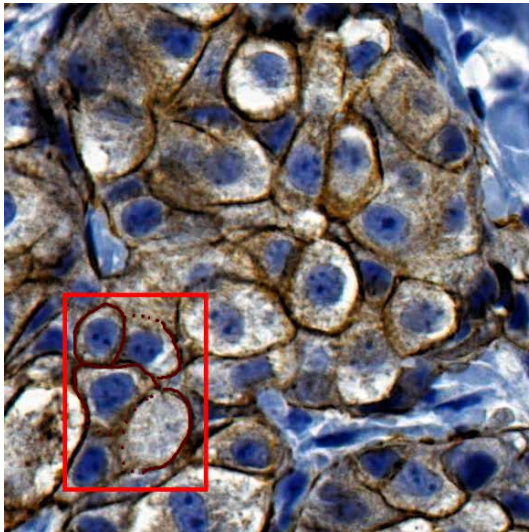
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# IMMUNOHISTOCHEMISTRY-STAINED IMAGES

In pathology, a typical case is the one immunohistochemistry-stained images (IHC-images) with overexpression of specific marker proteins on the cell membranes.



Some cell membranes are vague or even missing.

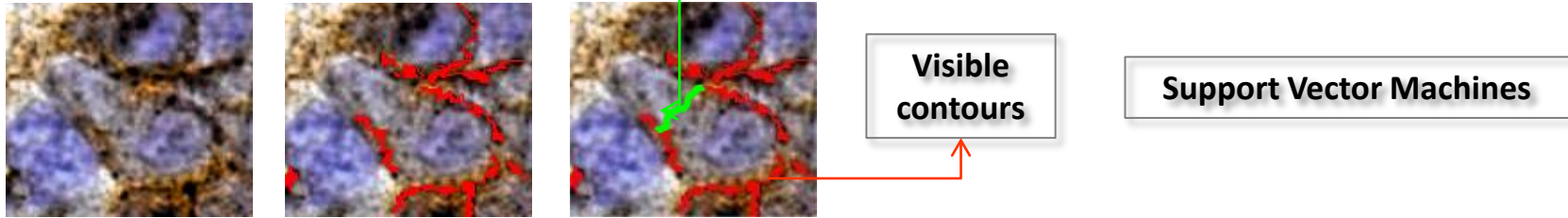


Cell segmentation

**IHC-image (40x) with HER2 overexpression. These images usually provide incomplete information about cell borders, leaving important portions of the membrane invisible.**

# MEMBRANE SEGMENTATION

## CELL-BY-CELL APPROACH



Currently working on multi-stage segmentations approach, including SVM and SS methods.

## GOLD STANDARD



We attempt to generate a gold standard database including manually segmented images.

Gold standard is necessary for training and validation of algorithms



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