

## Tissue Detection App

Outline tissue, TMA de-arraying, divide slides into scan areas.

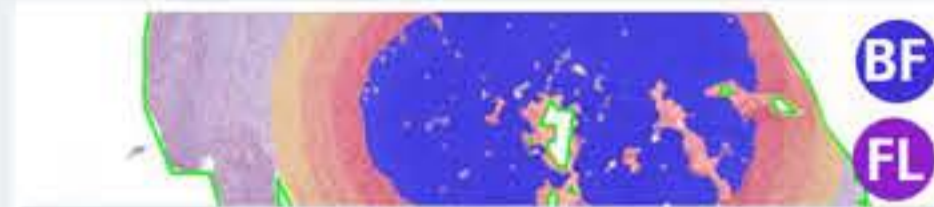


Tissue Detection

## Tissue Analysis Apps (find ROIs)

(find ROIs)

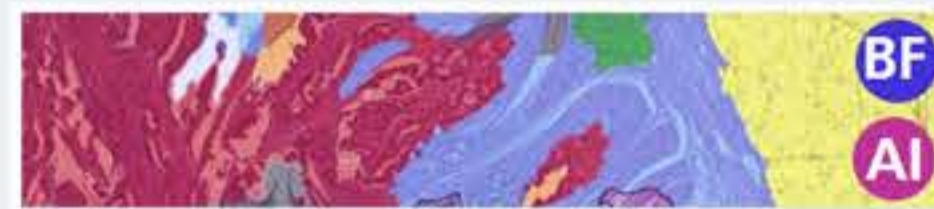
Analyze tissue and create masks that can serve as ROIs for further analysis.



Mask by Color



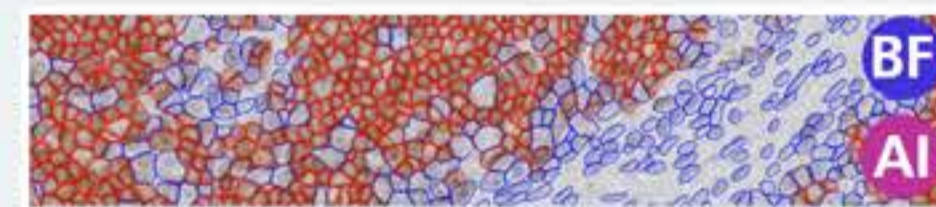
AI Author



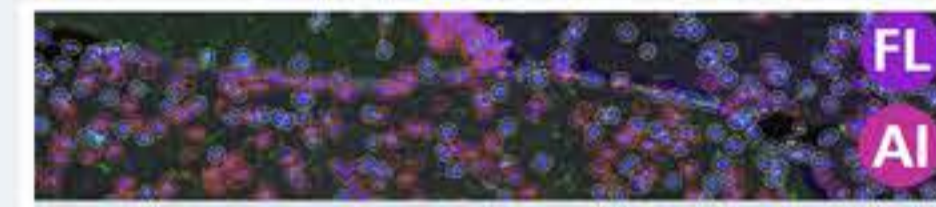
H&E Colon Tissue AI

## Cell / Spot / Object Detection Apps (per ROI)

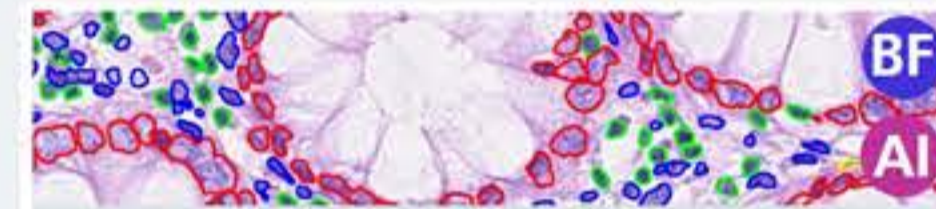
Detect cells or other objects and assign them to a ROI.



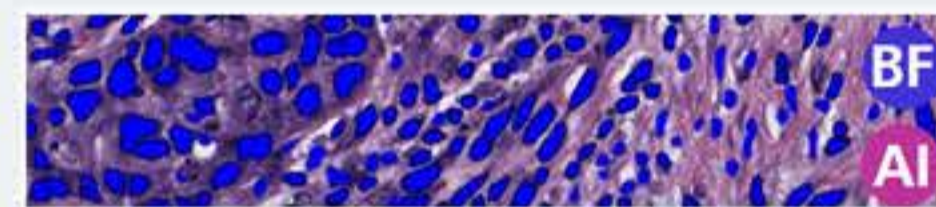
IHC Cell Detection



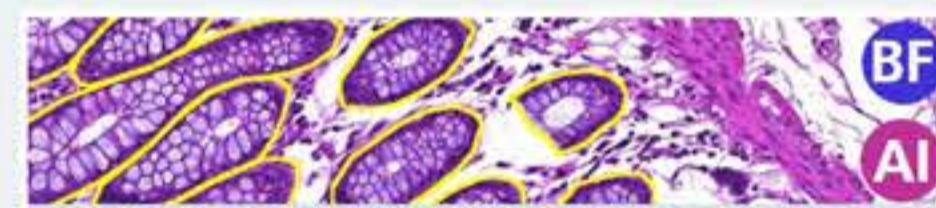
FL Cell Analysis



H&E Cell AI



H&E Cell AI (Detection only)



H&E Crypt AI



HER2/neu FISH

## Detected Objects Analysis Apps

Analyze already detected objects (spatial, color, or morphometric analysis).



Cell-Cell Connections



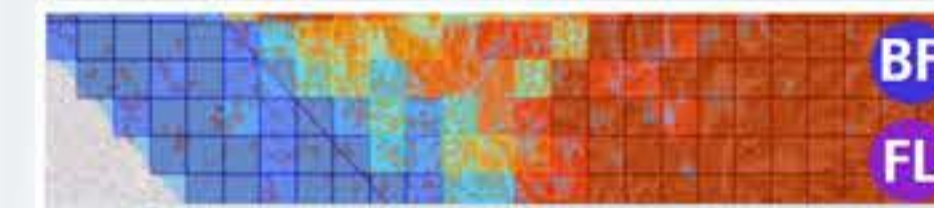
Spatial Clustering



Cellular Neighborhood



Proximity Analysis



Grid Analysis



Annotation Metrics

## Data Export

Export slide level results, markup and images

### Quantitative results

Each app exports to CSV (Excel)

### Markup

GeoJson (for QuPath), Aperio XML, CSV, MIKAIA ANO

### Image Export Apps



Annotation Image Export



Tile Export

### Further tools

- batch processing
- search hotspots
- density heatmap
- create concentric margins
- annotation set operations (fuse, subtract, intersect, clip)
- import/export annotations
- crop / export WSI
- live stain unmixing
- stain estimation
- undo / redo annotations
- edit annotations
- auto-save
- ...

```
# you can use your own AI model instead.
model = tf.keras.models.load_model("./my_model")
labels = ["Tumor Cells", "Inflammation", "Connective Tissue"]
patchwidth_px = 224
patchsize = 32
```

Plug-in your own AI

