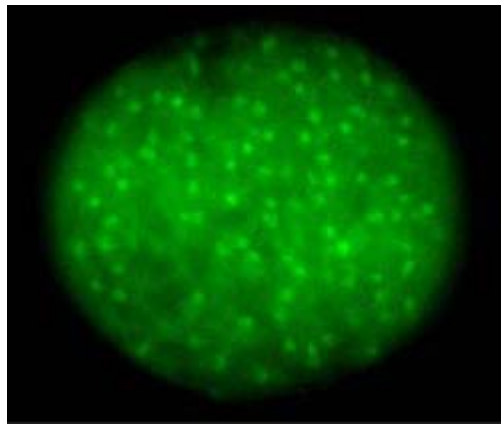


User Manual

VISUAL FLUO BACTERIA

Vers. 1.0



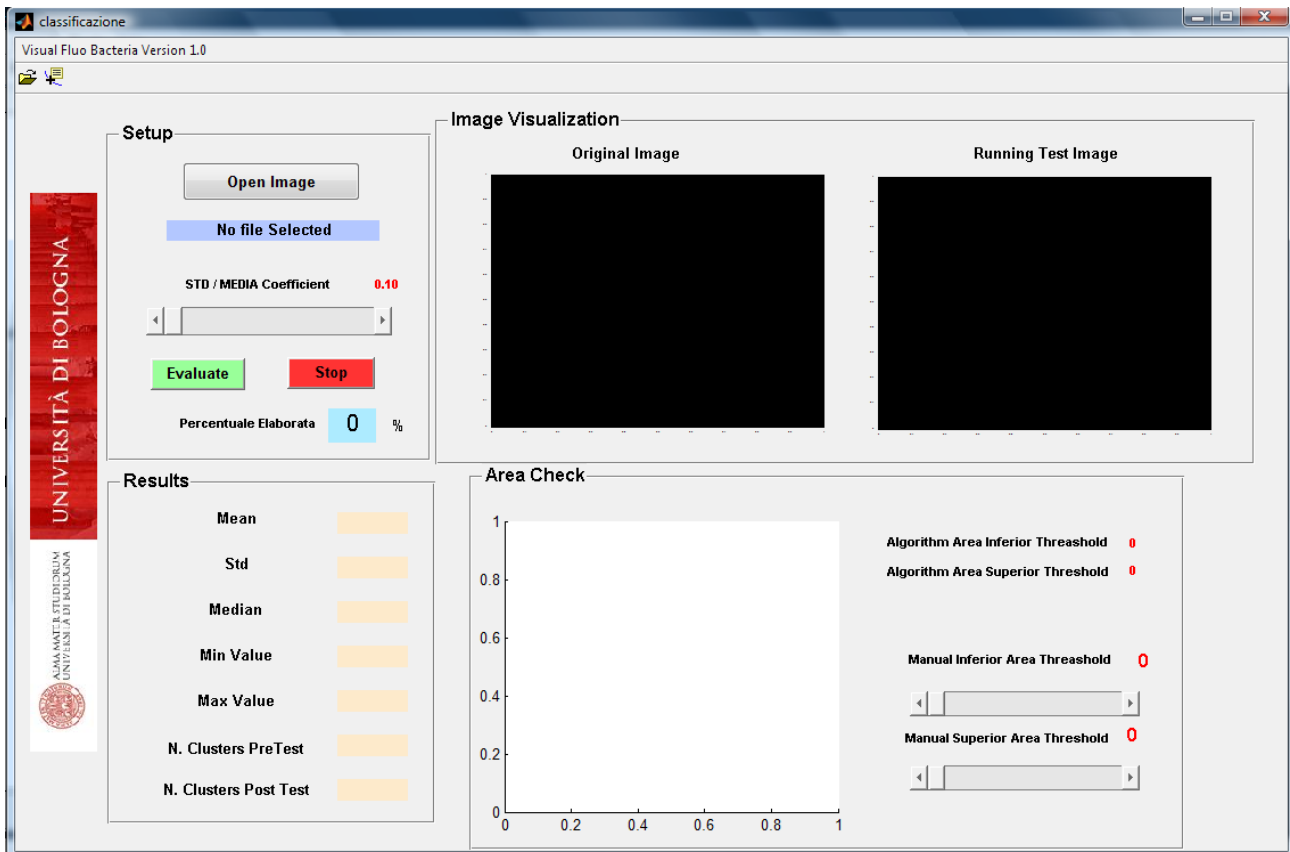
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1.1 Sections of GUI

In the main program window there are 4 sections:

- Setup
- Image Visualization
- Area Check
- Results

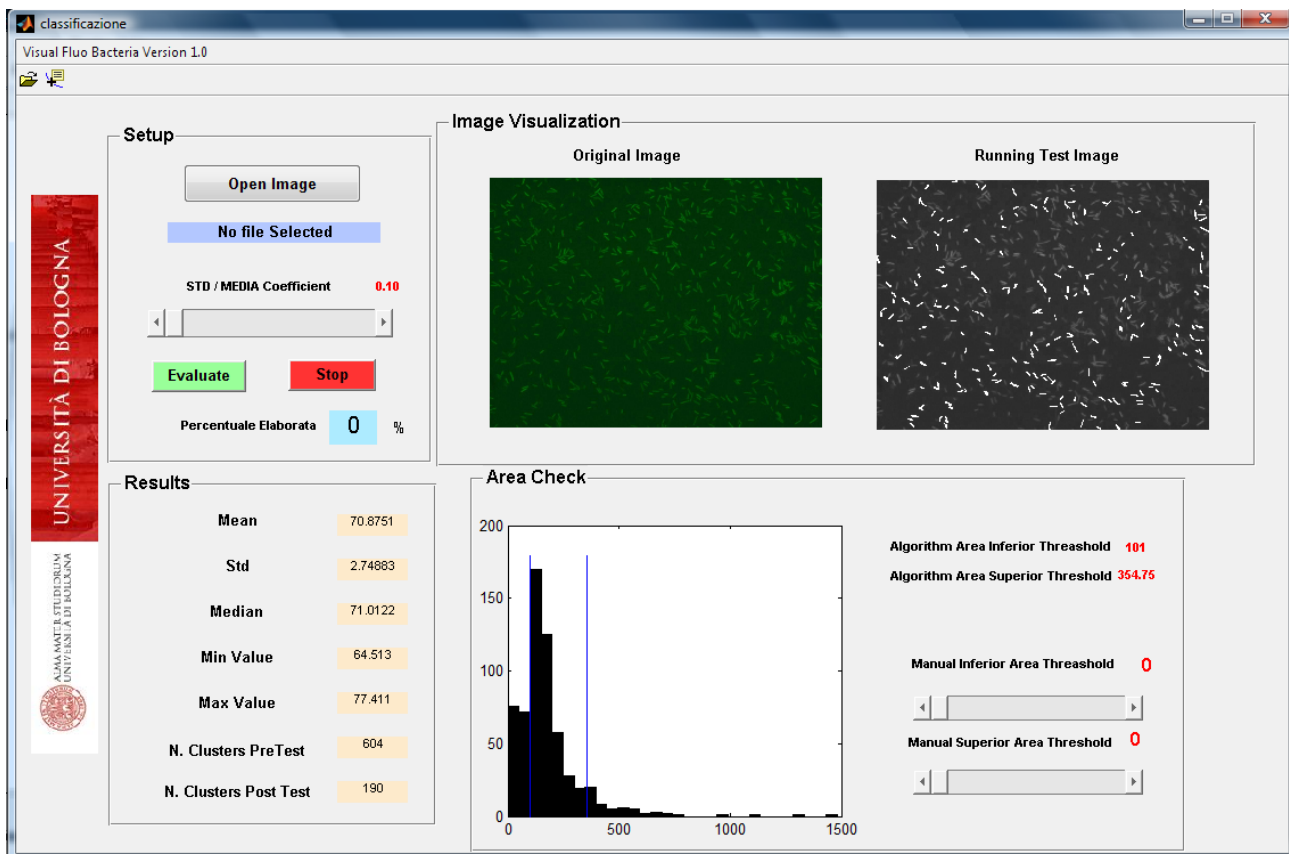


Step1: SETUP

- It needs to open an image file pushing on OPEN IMAGE;
- When the file is selected its name will be written in the blue box and the image will appear in the IMAGE VISUALIZATION Box;
- Choose the threshold STD / MEDIA for the “focus efficiency” (default = 0.10);
- Choose in the Area Check the manual inferior / Superior Area Threshold (**Optional**);
- Push Evaluate & wait the running algorithm until finish to scan the full image;

Step2: RESULTS & Area check

- When the Image has been full scanned the “bacteria cluster” that passed dimensions and focus efficiency thresholds will be appeared in white color.
- In Area Check Box there appear the Area histogram of bacteria clusters and the blue lines stand for the area thresholds that algorithm automatically compute (first quartile / third quartile + 1,5 * (third quartile – first quartile))
- If necessary it is possible to change area threshold by two scroll bar and restart the evaluation pushing green button.
- In Results Section there is the summary of test results : Mean Fluorescence Value, Standard Deviation, Median, Minimum fluorescence value, Maximum fluorescence value, Number of bacteria cluster detected, Number of bacteria cluster that have dimension and focus efficiency under the threshold.



FLOW CHART Algorithm

