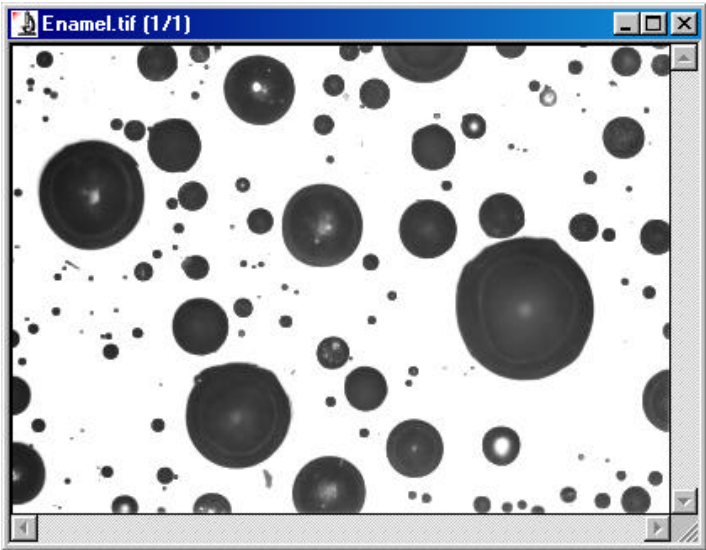


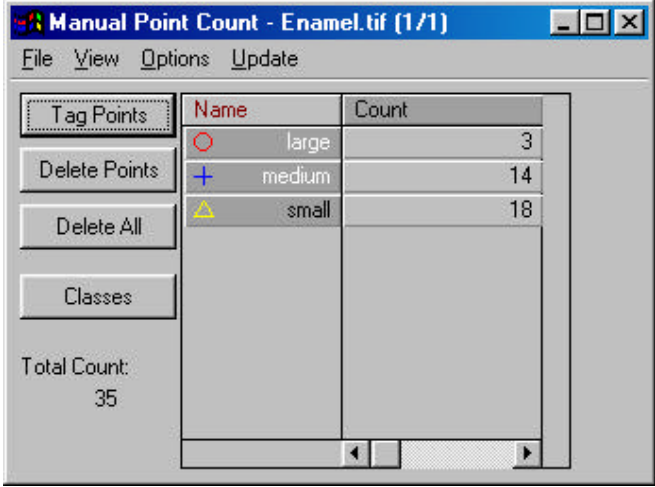
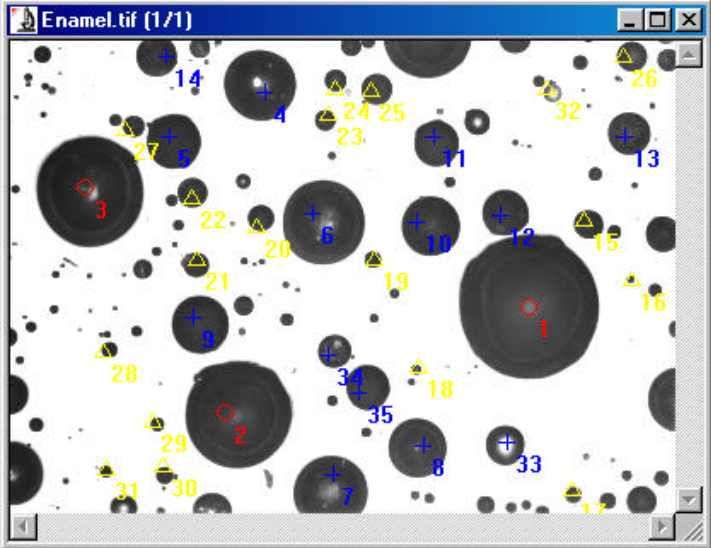
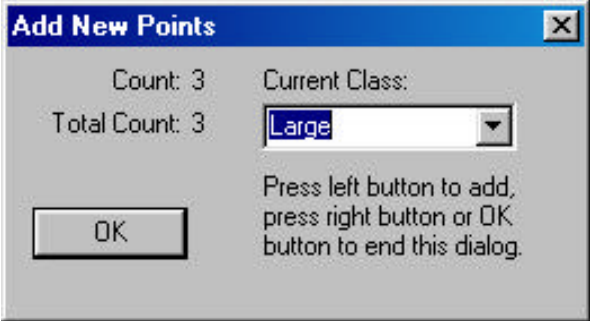
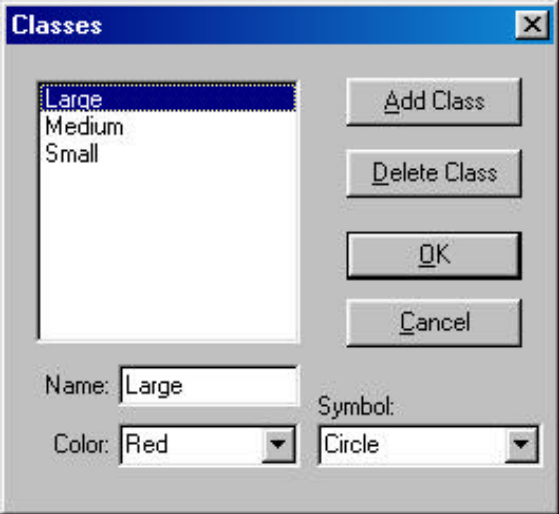
# Classification: Manual Tag, Auto-Classification, Single Variable Classification



You want to analyze an image with many objects of varying sizes. This could be an image of cell nuclei, beads, particles, inclusions, or holes. How can Image-Pro help to classify and count the objects within each class or range?

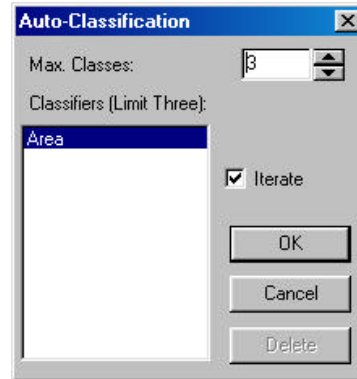
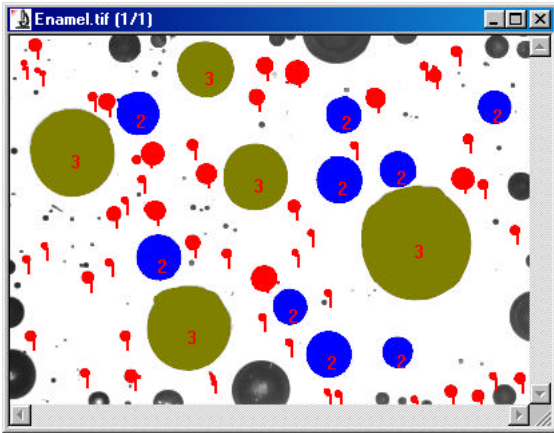
## Manual Tag

The Manual Tag feature allows you to define classes, click on objects belonging to each class and obtain a running count. Object selection and class placement rely purely on visual cues.



# Auto-Classification

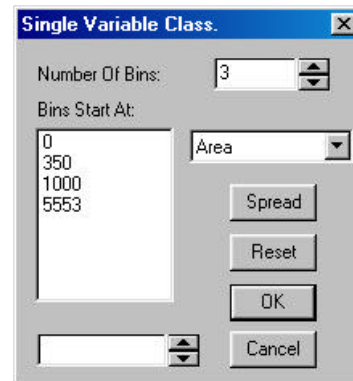
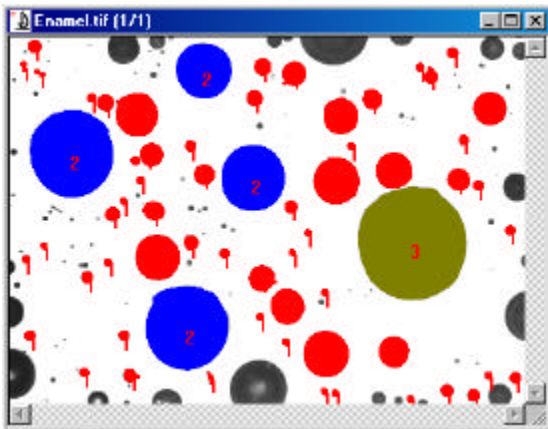
Auto-Classification automatically categorizes counted objects into groups with similar measurements. The user selects the number of classes and the measurement types (up to 3) to be used as classifiers.



| Class | Objects | % Objects | Total Area | % Area    | Mean Area | Std.dev. Area | Min Area | Max Area |
|-------|---------|-----------|------------|-----------|-----------|---------------|----------|----------|
| 1     | 58      | 92.063492 | 10204      | 40.135303 | 175.93103 | 244.91553     | 22       | 954      |
| 2     | 4       | 6.3492064 | 9667       | 38.023129 | 2416.750  | 799.46747     | 1383     | 3249     |
| 3     | 1       | 1.5873016 | 5553       | 21.841566 | 5553      | 0             | 5553     | 5553     |

# Single Variable Classification

Single Variable Classification lets the user categorize objects by their measurement values within a single class. The user may specify the measurement type, number of categories, and interval values.



| Class | Objects | % Objects | Total Area | % Area    | Mean Area | Std.dev. Area | Min Area | Max Area |
|-------|---------|-----------|------------|-----------|-----------|---------------|----------|----------|
| 1     | 49      | 77.777779 | 3954       | 15.552234 | 80.693878 | 72.740860     | 22       | 307      |
| 2     | 9       | 14.285714 | 6250       | 24.583071 | 694.44446 | 198.78470     | 420      | 954      |
| 3     | 5       | 7.9365077 | 15220      | 59.864697 | 3044      | 1443.9836     | 1383     | 5553     |