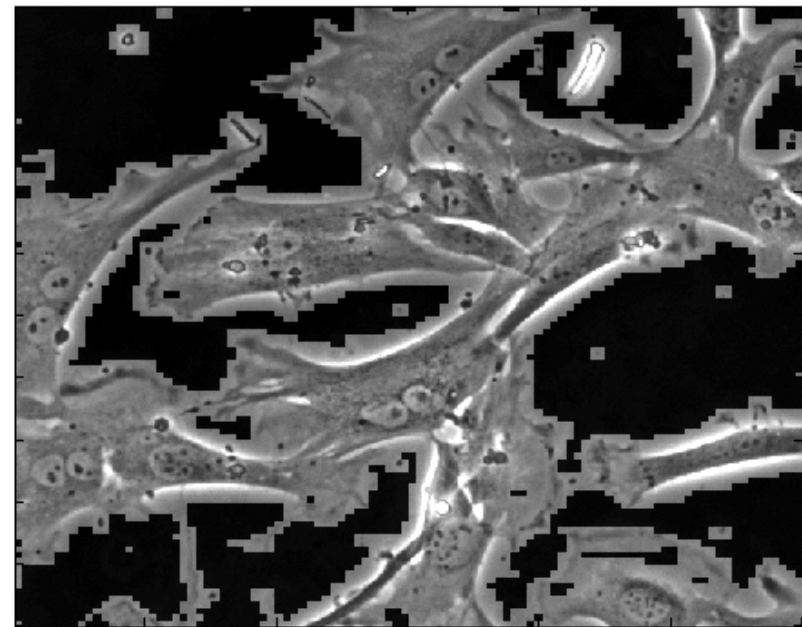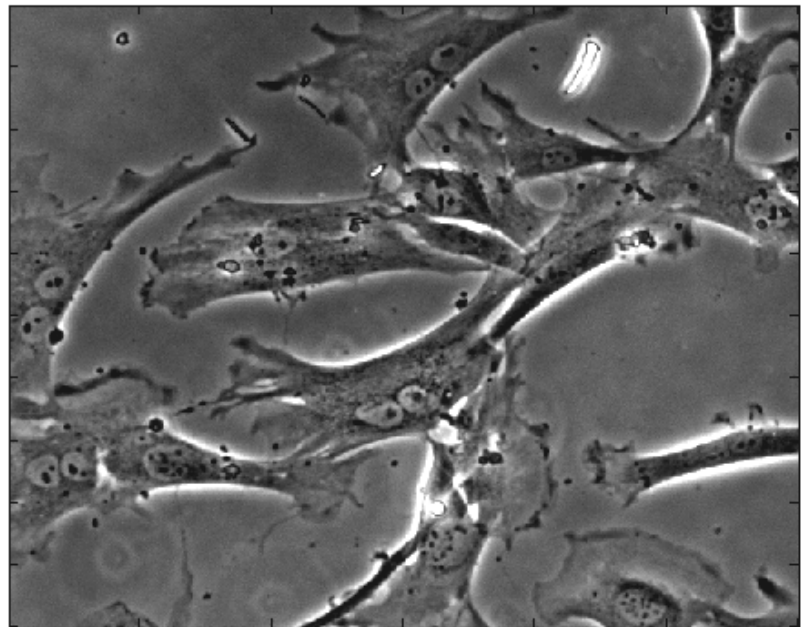# MATLAB program to automatically quantify cell density based on variance across image segments

Algorithm:

- Segment image into sub-images
- Compute intensity variance in each segment
- Estimate background variance
- If variance is greater than background, segment is a "cell"; otherwise, "background"
- Calculate % confluence from ratio of segments that are "cell" vs. "background"