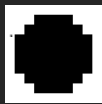
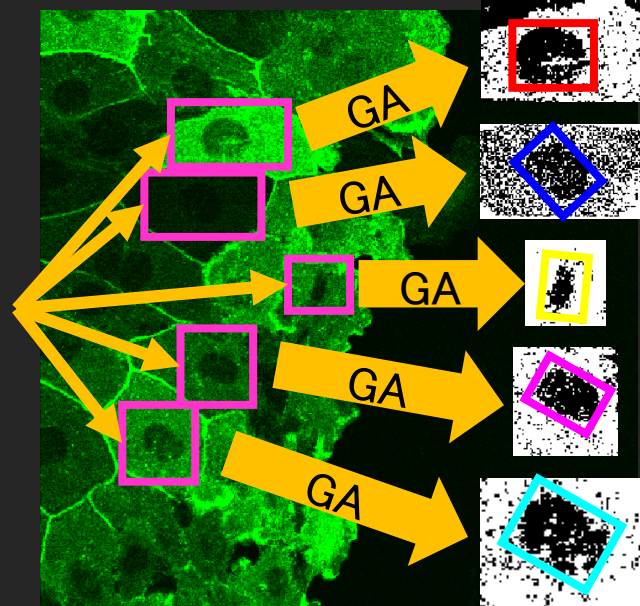


Brightness and shape change invariant nuclei detection and tracking

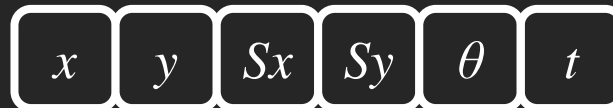
● Approach

- Genetic algorithm (GA) + template matching
- Optimization of geometric transformation and binarization parameters using GA

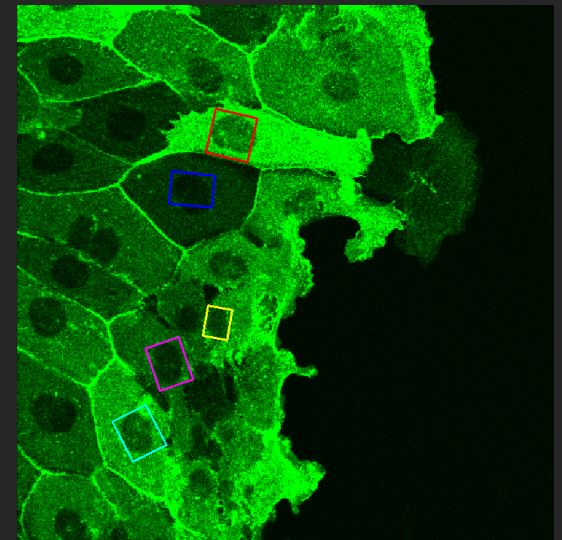
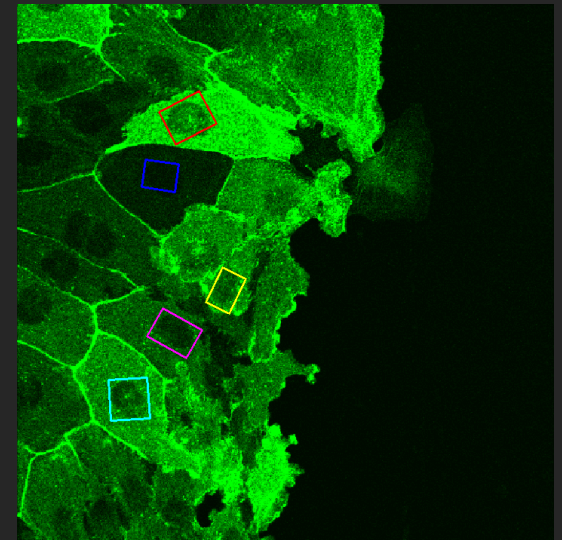
Set of search space for GA only in the initial frame



Used template
(20 × 20 pixels)



Chromosome structure



Tracking example