## **ImageJ: Counting Particles**

- 1. File  $\rightarrow$  Open Image
- 2. Image  $\rightarrow$  Arrange Channels



a. Click on old-1 and select grays



b. New channel order: 1



3. Process → Subtract Background [Rolling Ball: 5 pixels]



4. Image  $\rightarrow$  Adjust  $\rightarrow$  Threshold



a. Go left on the top scroll (11-20% and avoid tiny dots/noise)



b. Hit Apply

5. Process  $\rightarrow$  Binary  $\rightarrow$  Fill Holes



6. Process  $\rightarrow$  Binary  $\rightarrow$  Convert to Mask



7. Process  $\rightarrow$  Binary  $\rightarrow$  Watershed



8. Analyze  $\rightarrow$  Analyze Particles  $\rightarrow$  Size (pixel ^2): 30-infinity

a. Manipulate the pixels depending on the need



9. Find the total number of particles on the bottom left side

