

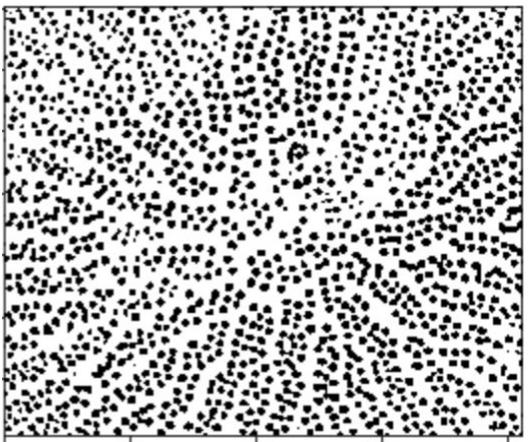
Adaptive thresholding:

There were 2 types of adaptive thresholding I looked at: Mean and Gaussian

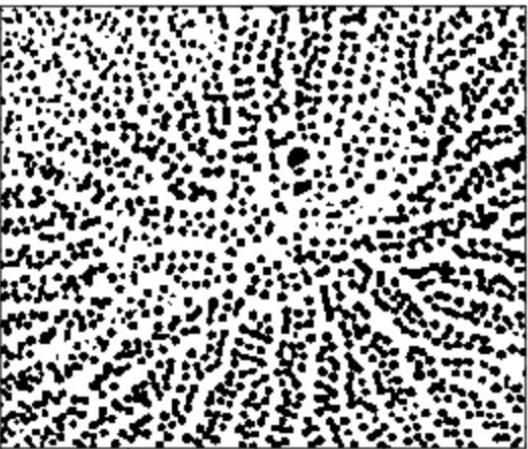
There were 3 types of blurring that I tried: Gaussian, Median, and Averaging;
gaussian and averaging seemed to work best

The blur was 17, 17, the size was 31, and the constant was 5 (see thresholding experimentation kate)

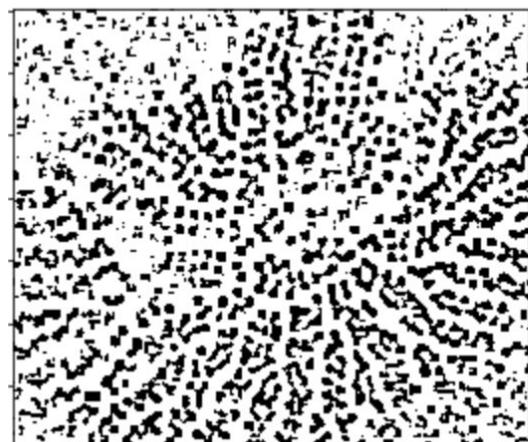
Gaussian blur with gaussian threshold



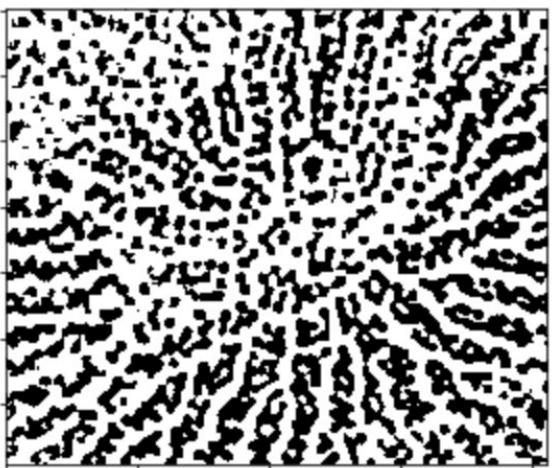
Gaussian blur with mean threshold



Average blur with gaussian threshold



Average blur with mean threshold



Conclusion/ranking:

1. Average blur mean threshold
2. Gaussian blur mean threshold
3. Gaussian blur gaussian threshold
4. Average blur gaussian threshold

Note: this is Wild 004

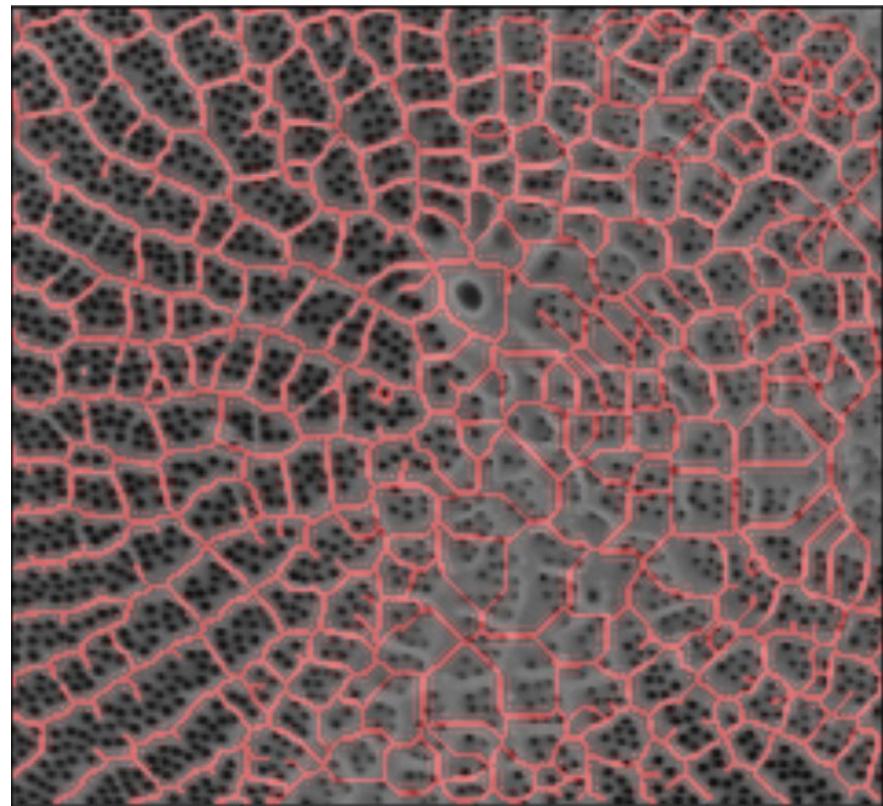
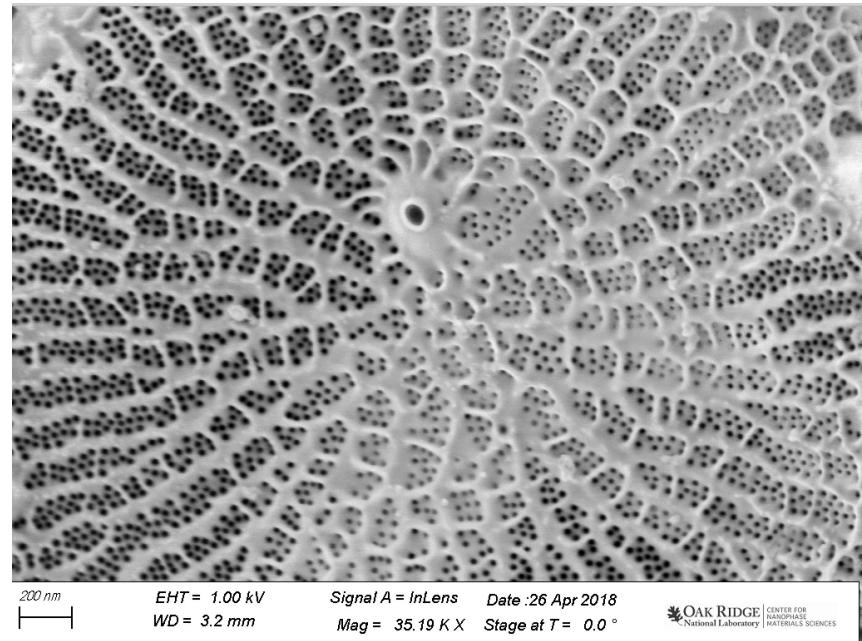
Testing Yen threshold with 13 blur

So this was really a hit or miss... sometimes there were major improvements, other times I'm not even sure what happened (actually I do; it was just blurred too much)

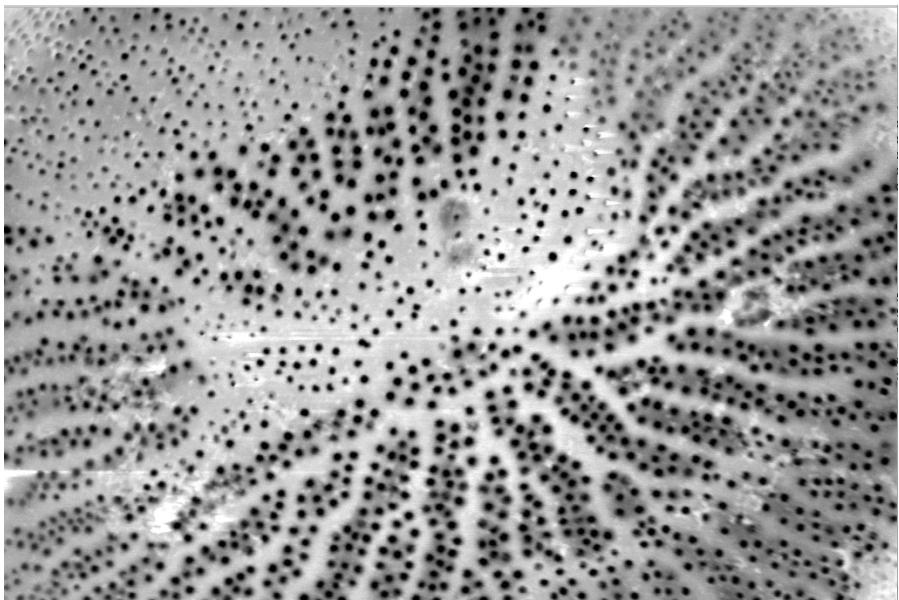
To confront the blurring problem, it might be good to write a function that finds the range of the colors in each picture and blurs accordingly (bigger range= more blur); this will be helpful for the ones that improved, too because some could still be blurred more

I'll go back to the adaptive thresholding and test a few different pictures and then decide which option seems more promising

Wild 002



Wild 004

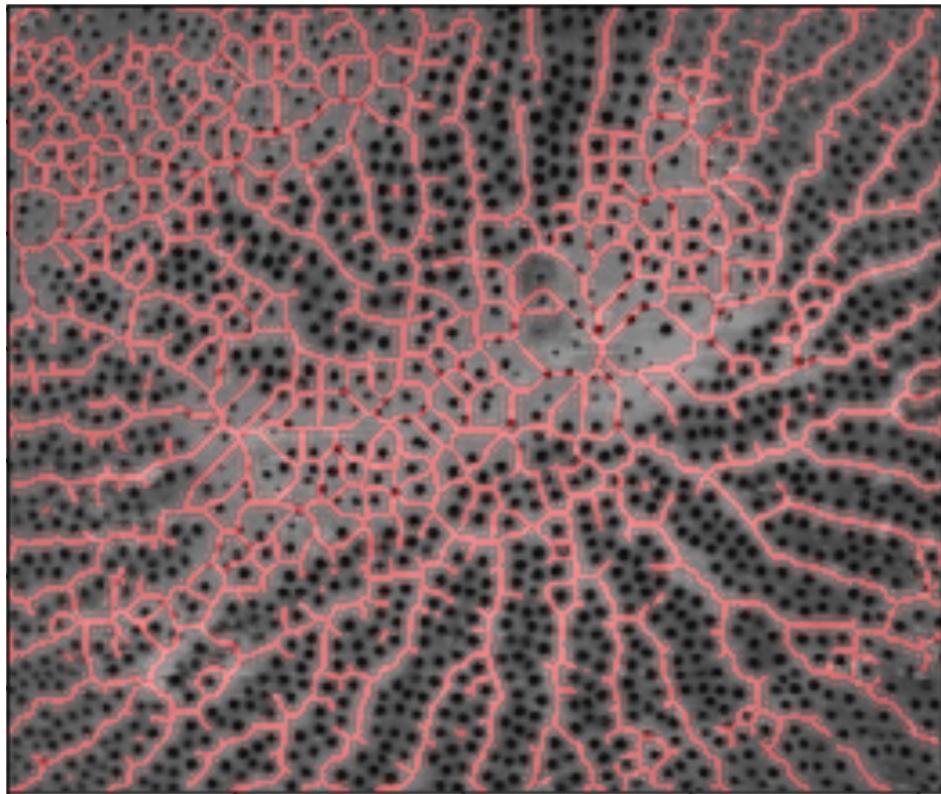


300 nm

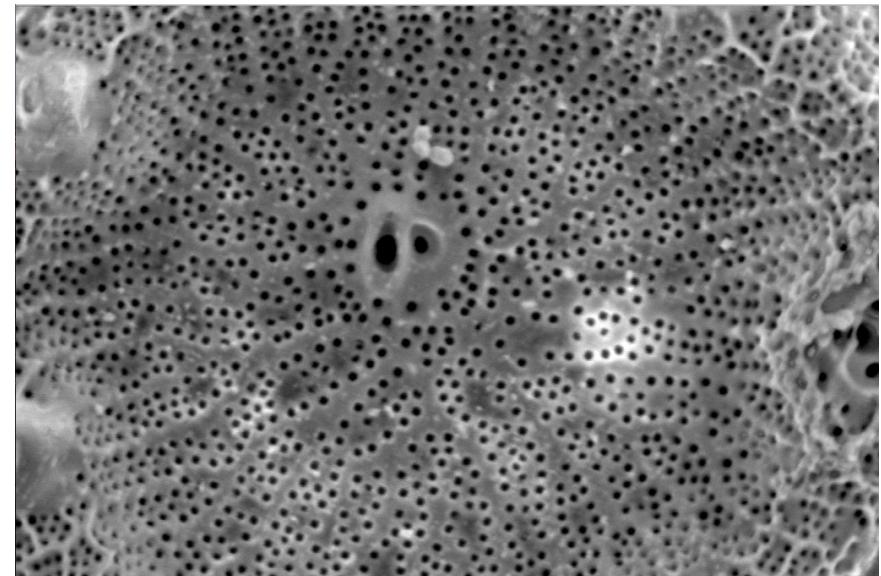
EHT = 1.00 kV
WD = 3.2 mm

Signal A = InLens Date : 26 Apr 2018
Mag = 38.24 K X Stage at T = 0.0 °

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Wild 006

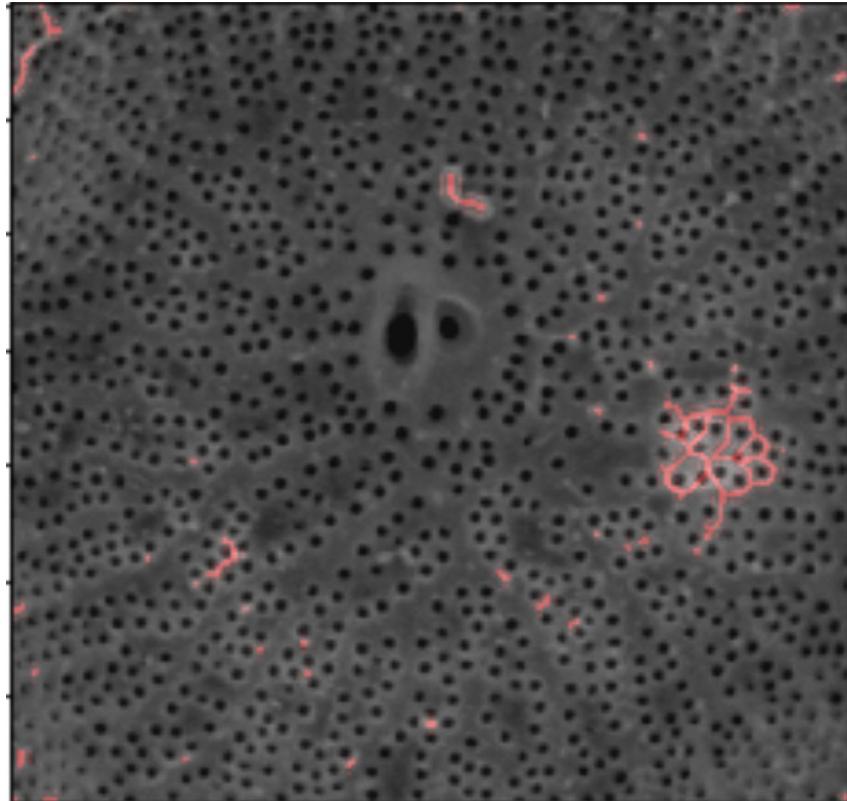


200 nm
 200 nm

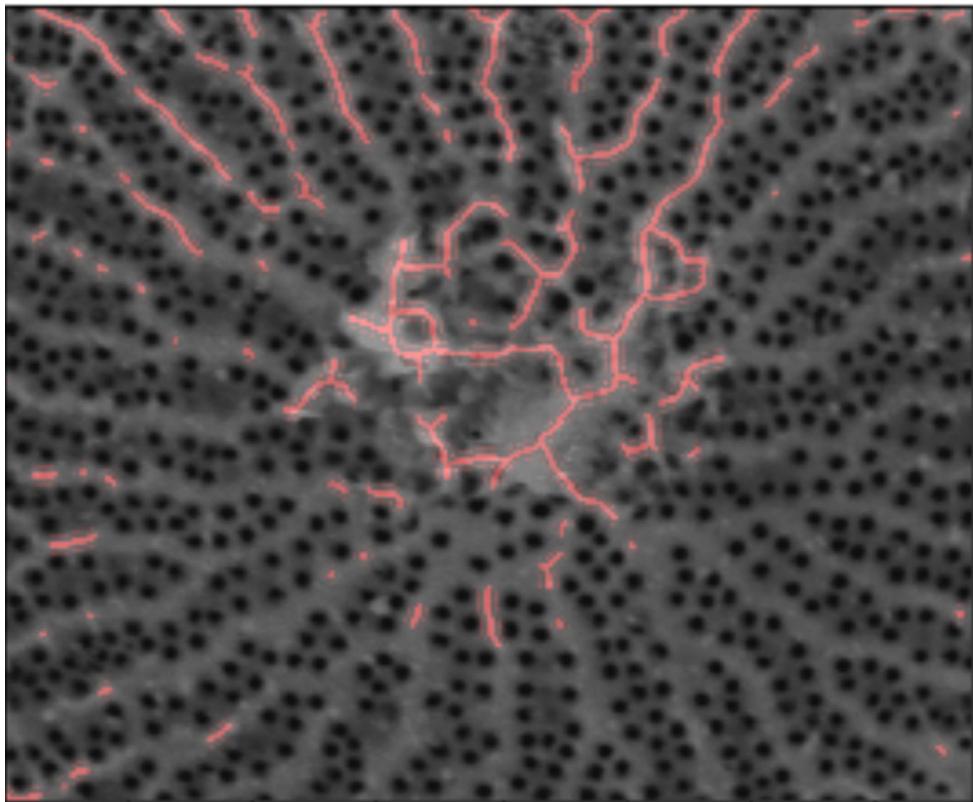
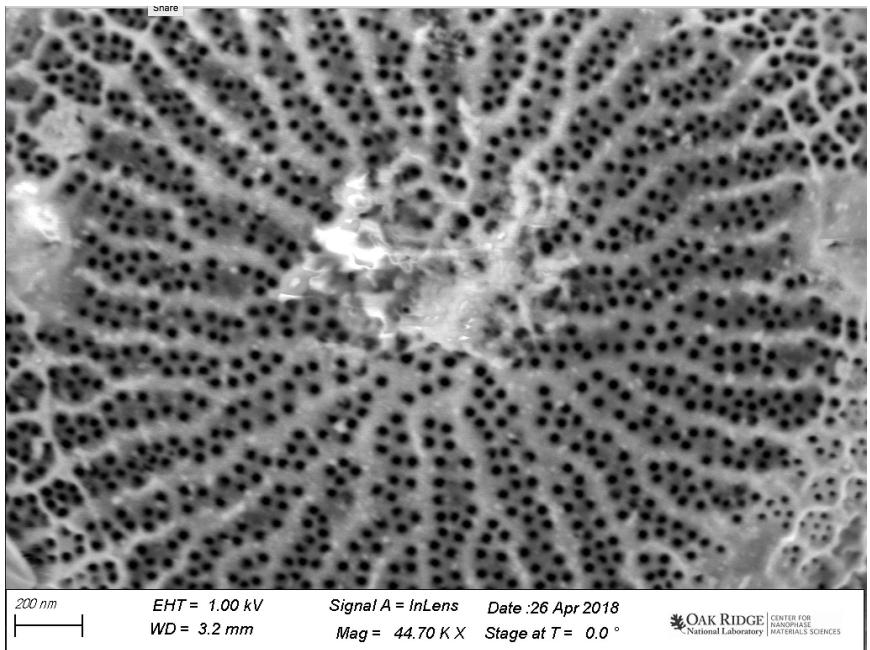
EHT = 1.00 kV
WD = 3.2 mm

Signal A = InLens Date :26 Apr 2018
Mag = 45.17 K X Stage at T = 0.0 °

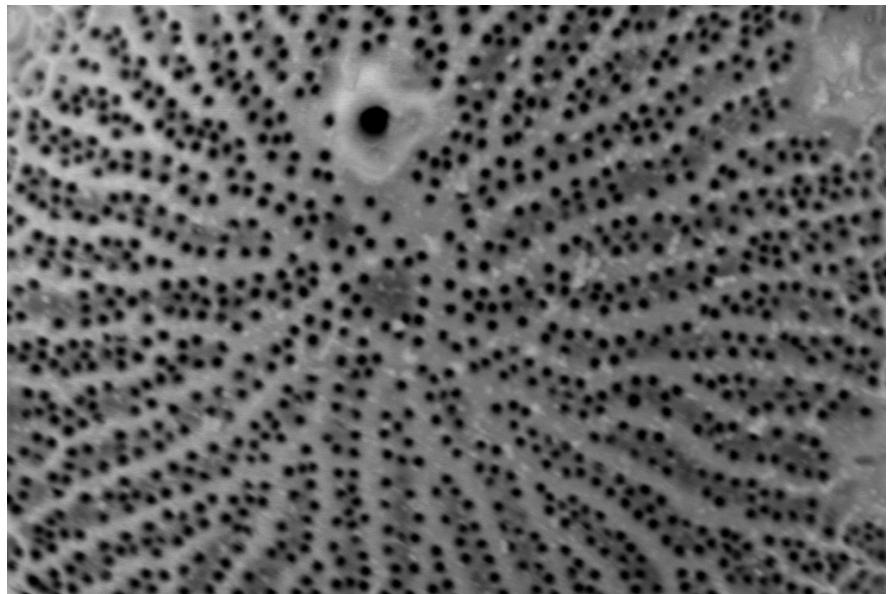
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Wild 007



Wild 008

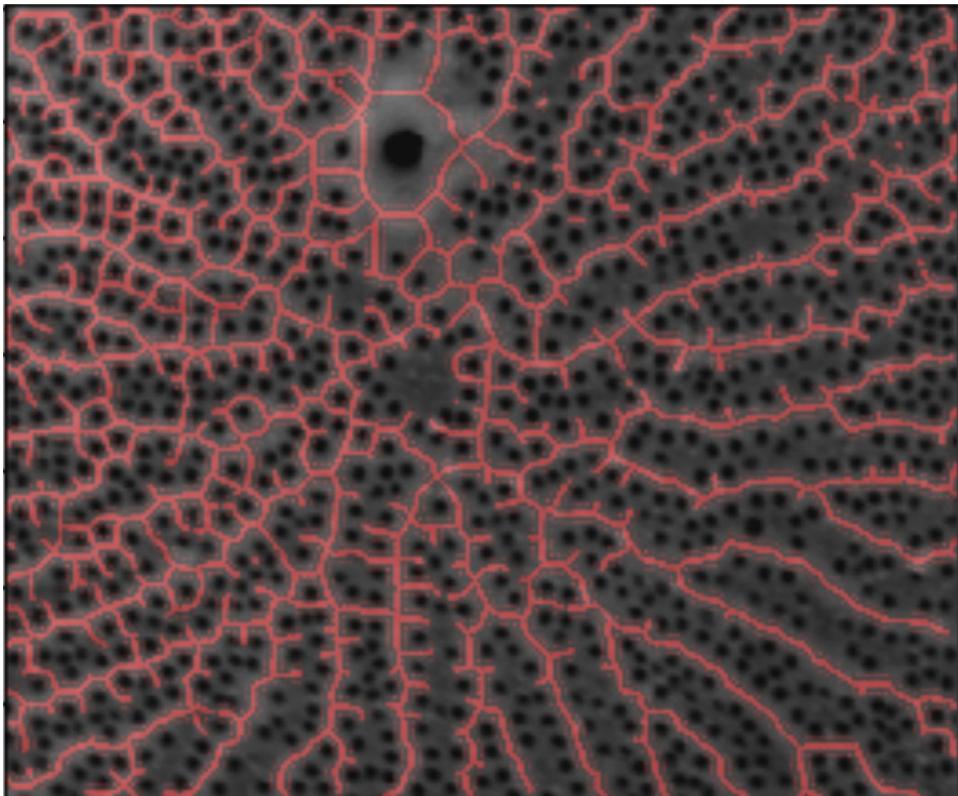


300 nm

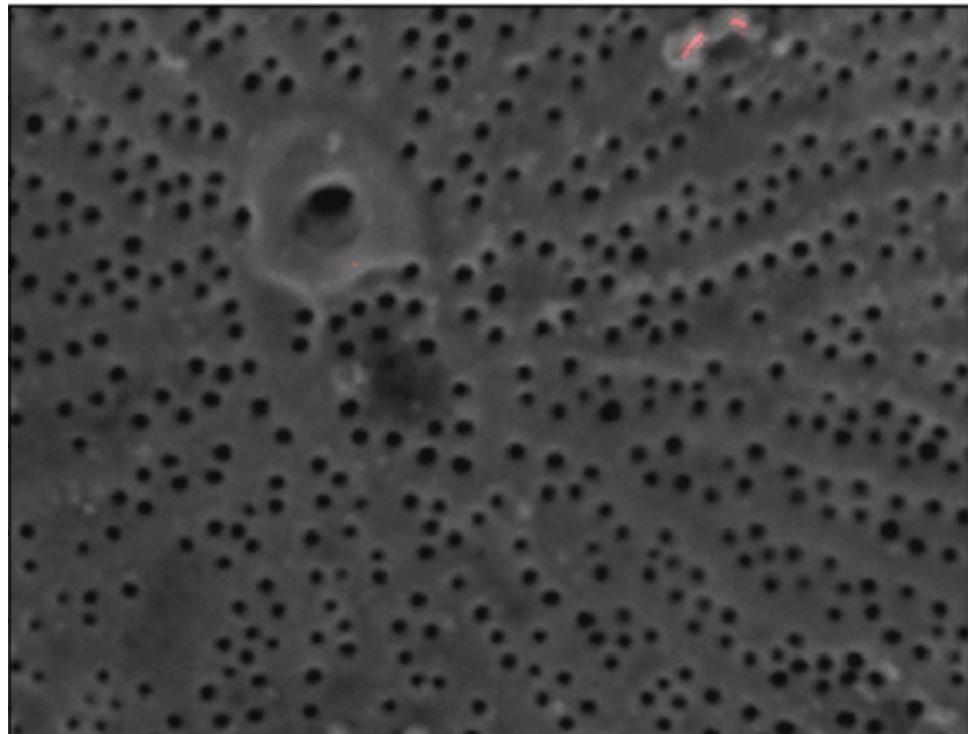
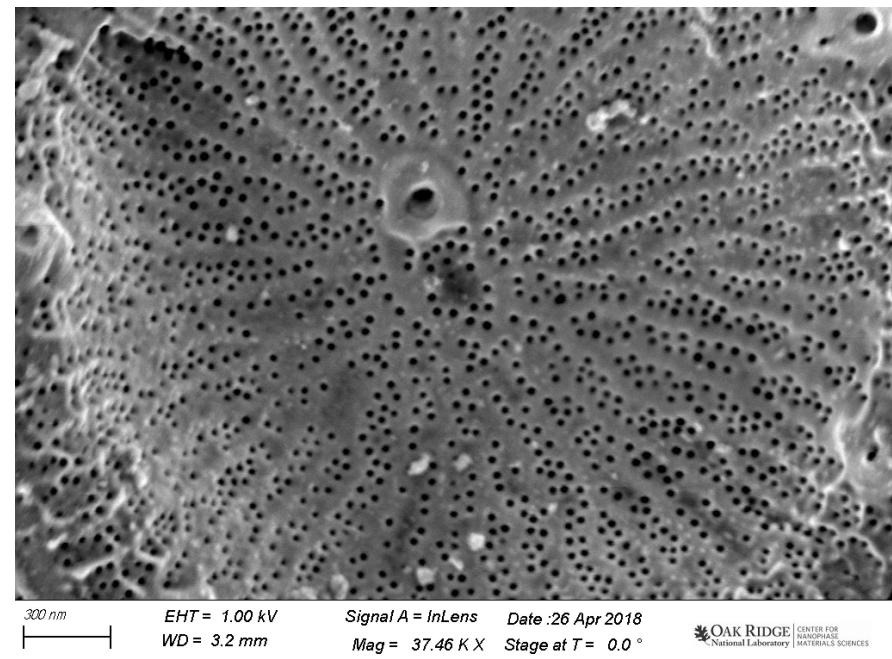
EHT = 1.00 kV
WD = 3.2 mm

Signal A = InLens
Date :26 Apr 2018
Mag = 45.64 K X
Stage at T = 0.0 °

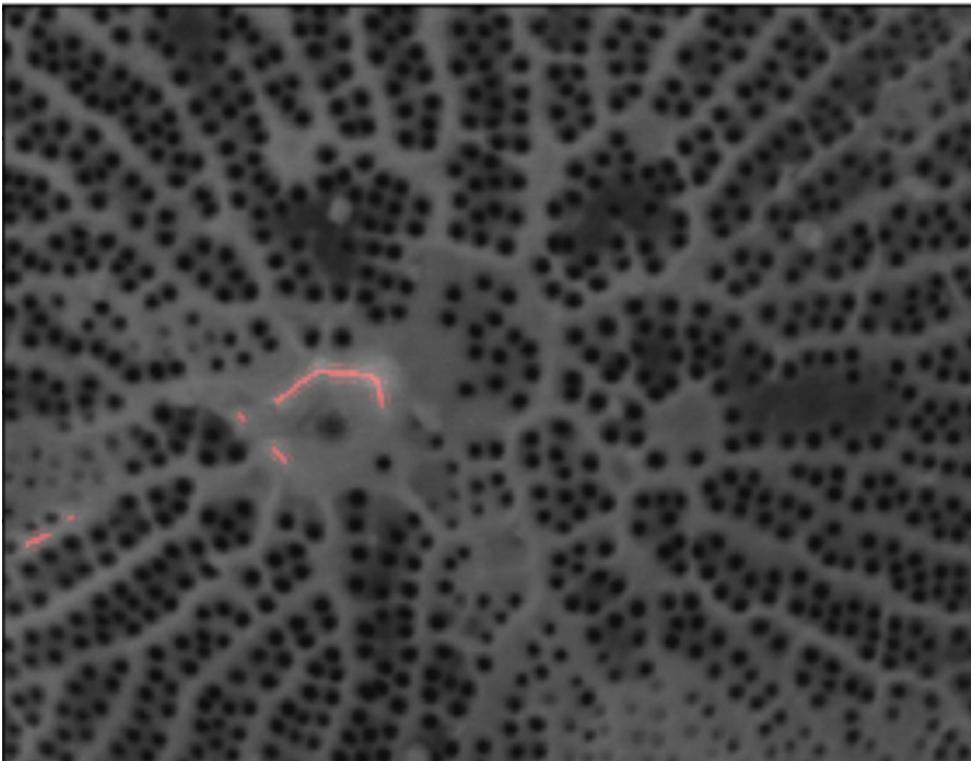
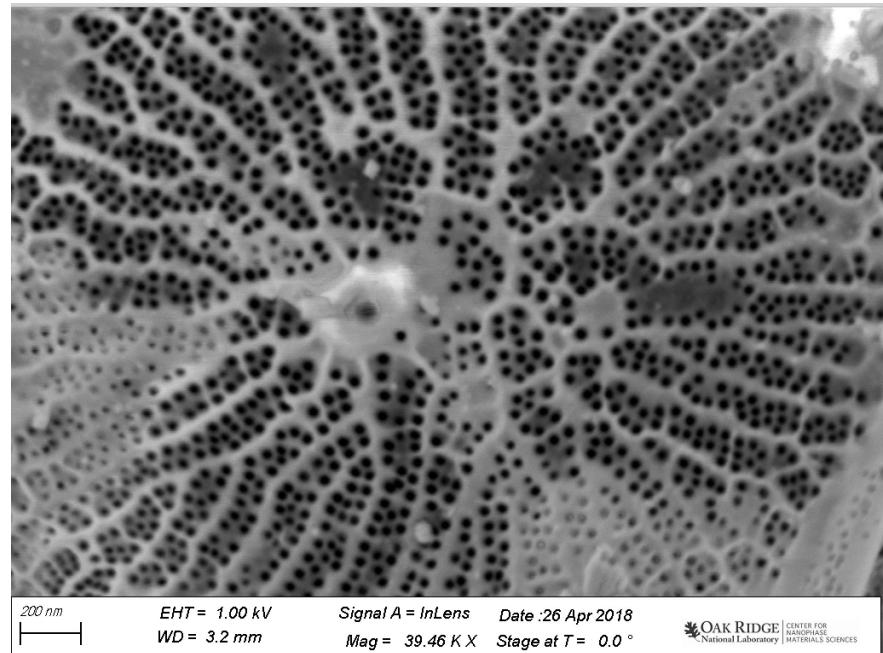
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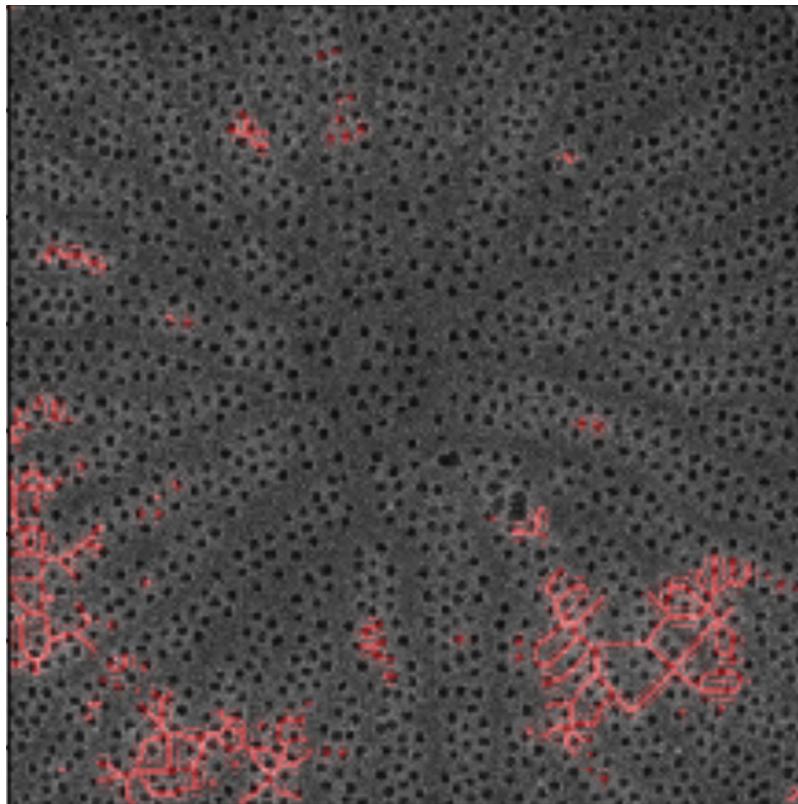
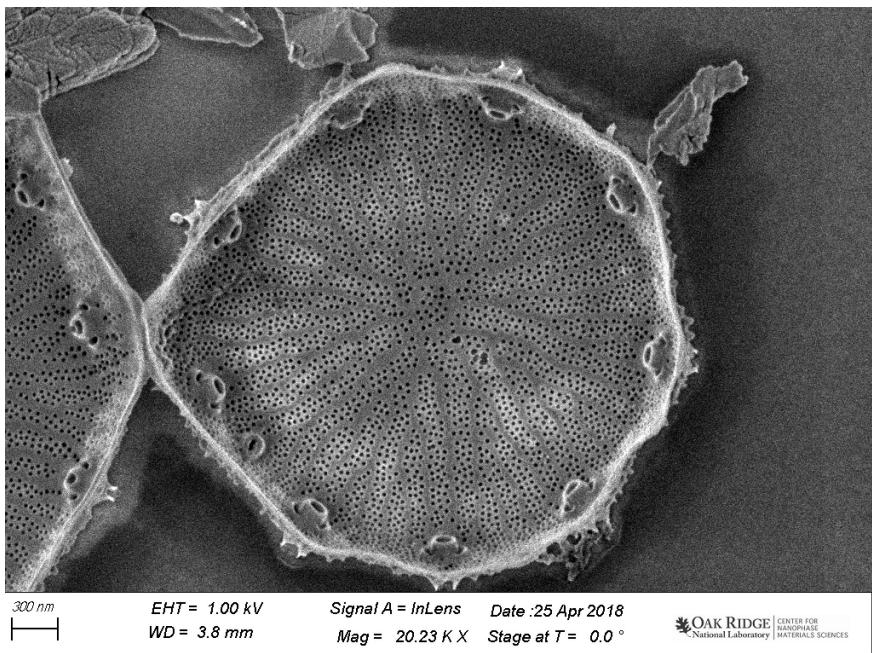
Wild 010



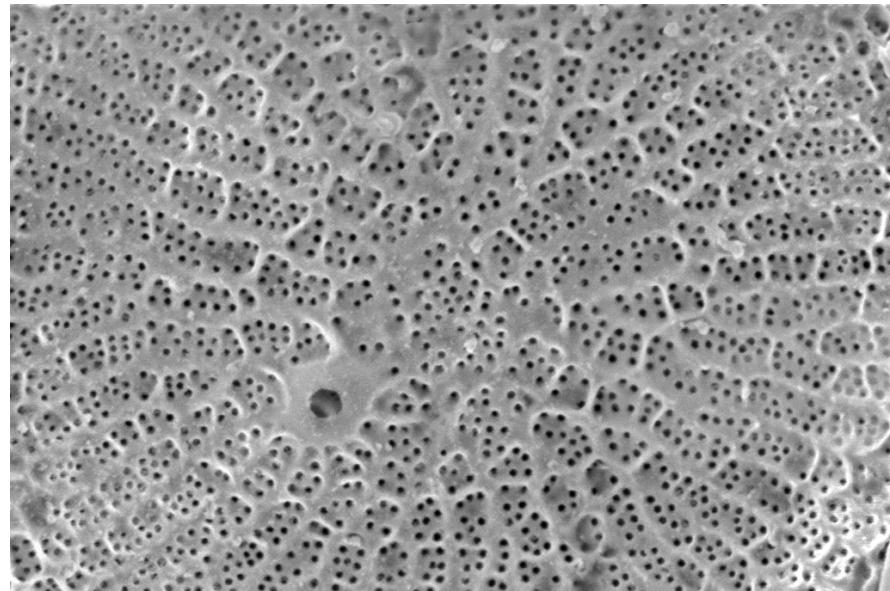
Wild 012



Wild 013

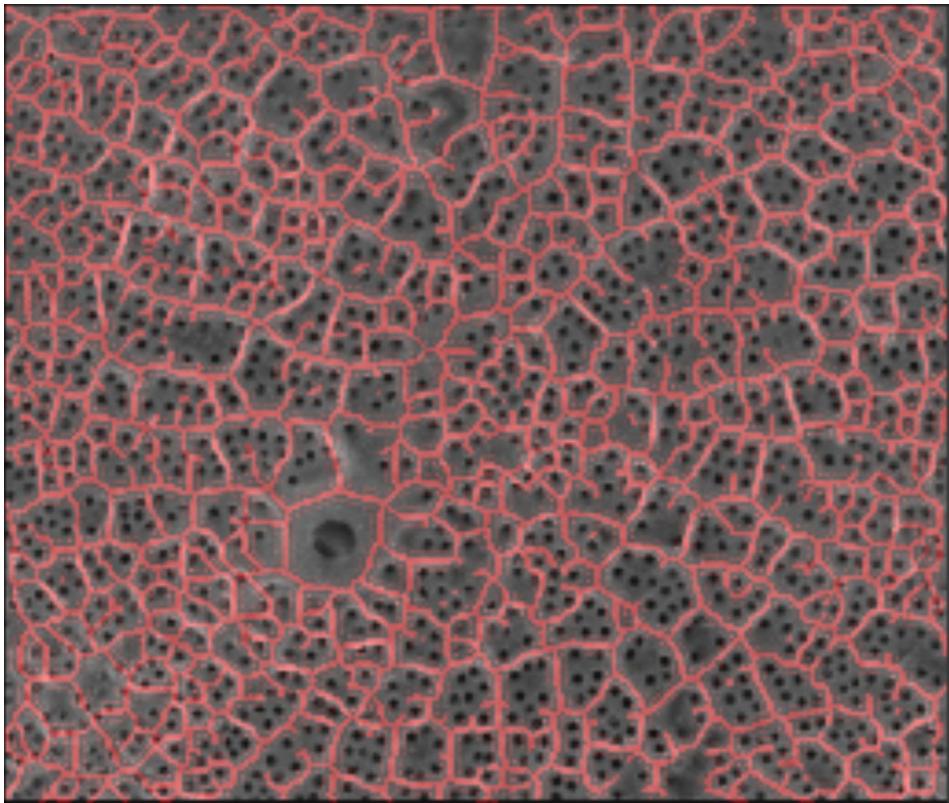


Wild 015

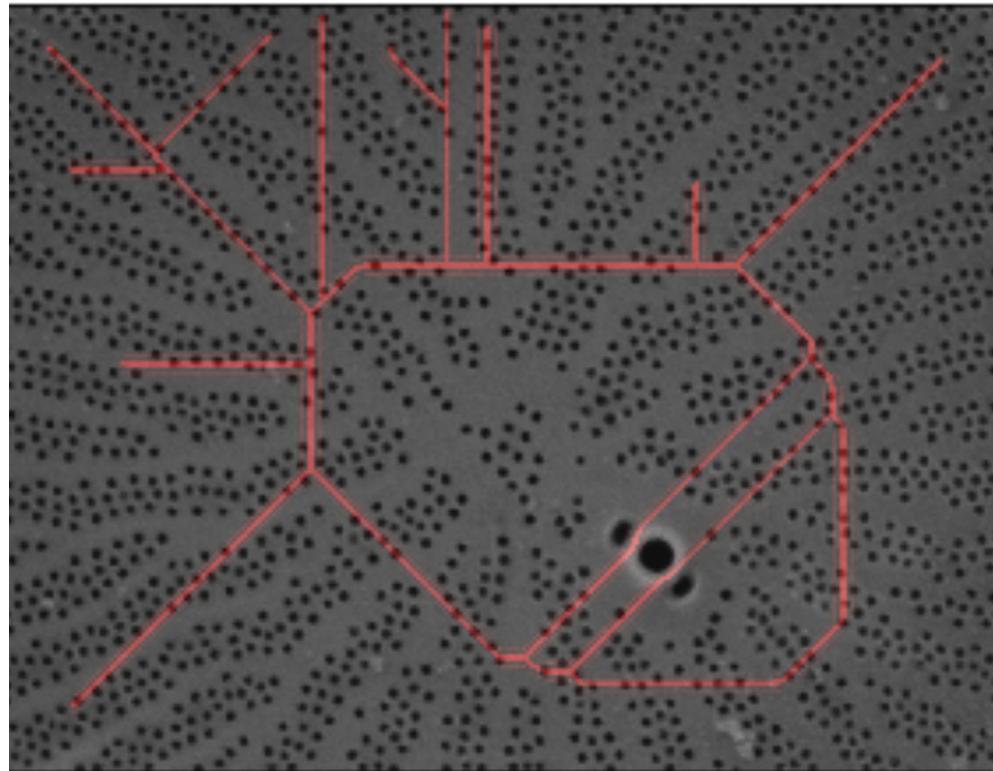
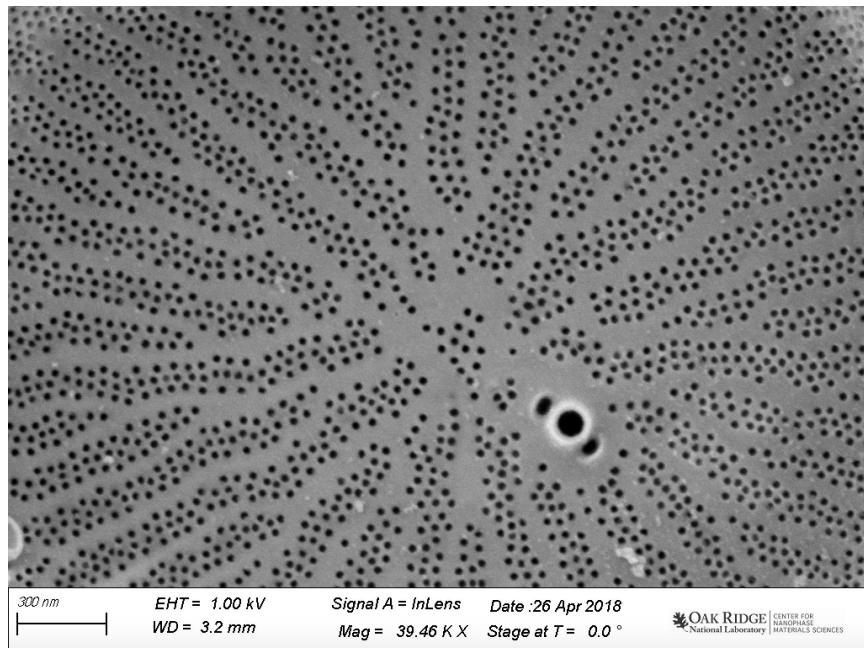


200 nm EHT = 1.00 kV Signal A = InLens Date :26 Apr 2018
WD = 3.2 mm Mag = 35.93 K X Stage at T = 0.0 °

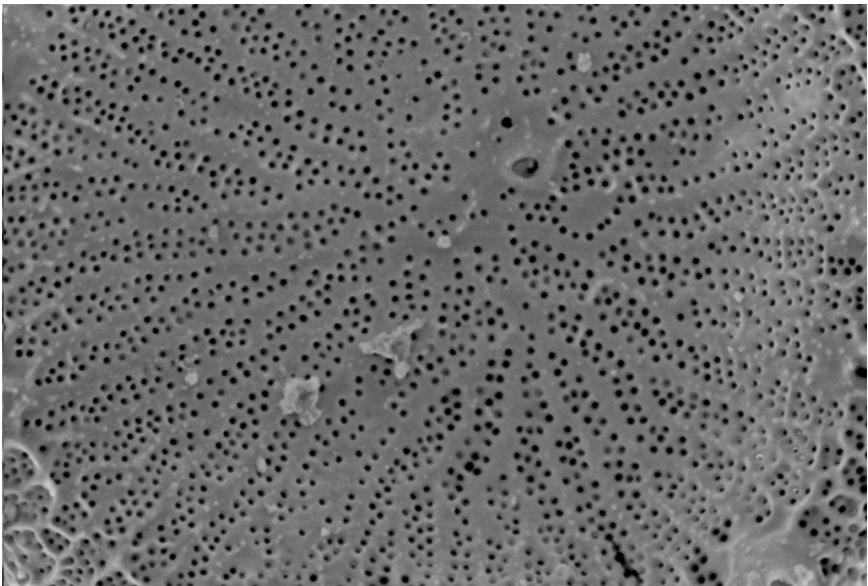
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Wild 016



Wild 018

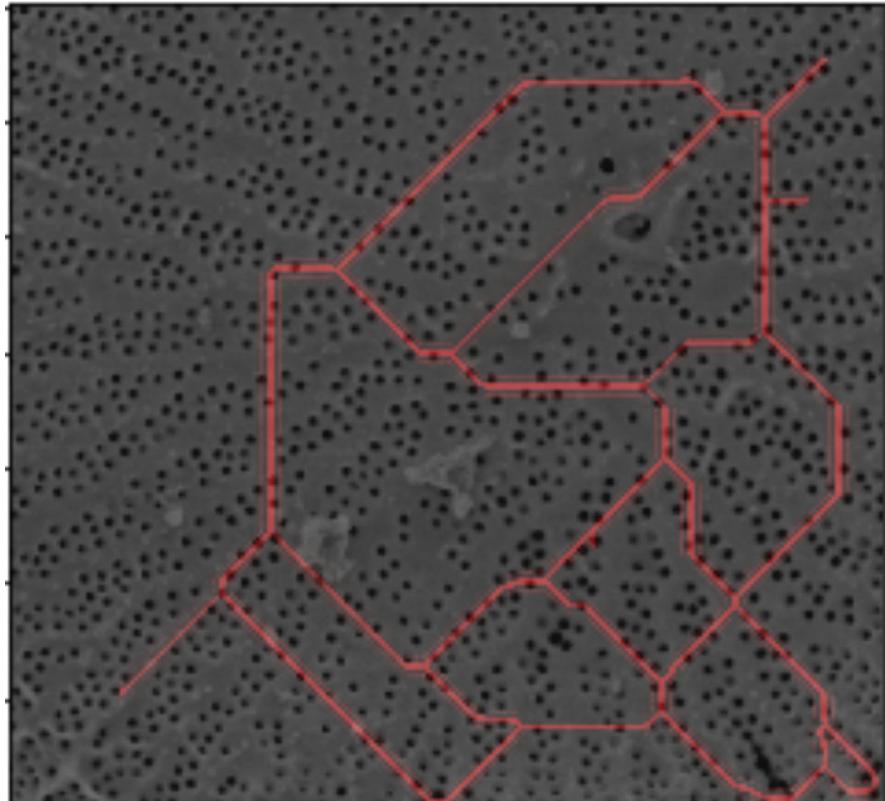


200 nm

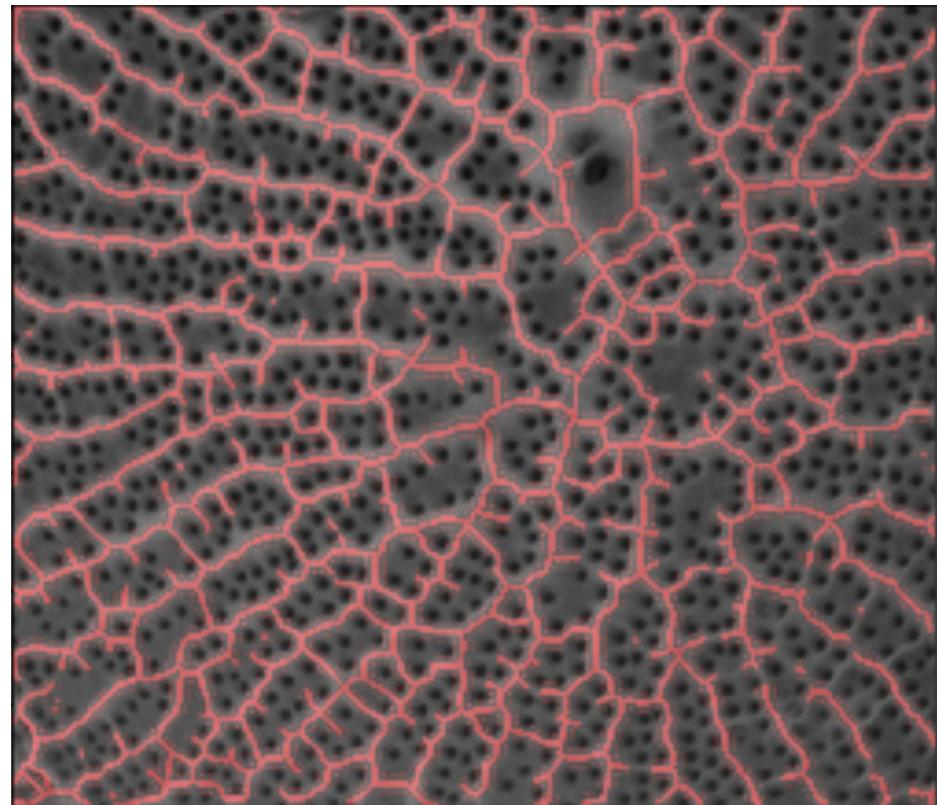
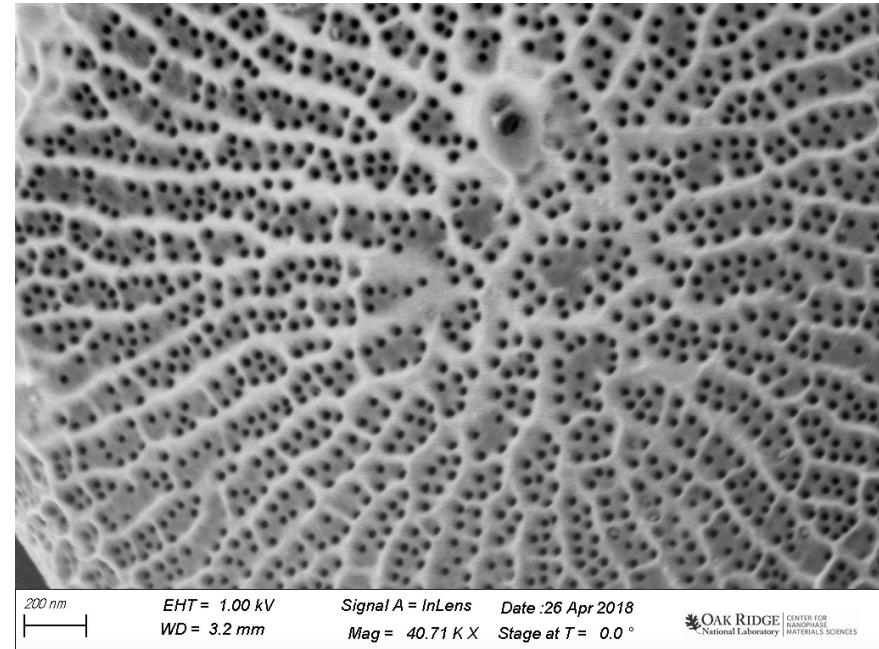
EHT = 1.00 kV
WD = 3.2 mm

Signal A = InLens Date : 26 Apr 2018
Mag = 37.46 K X Stage at T = 0.0 °

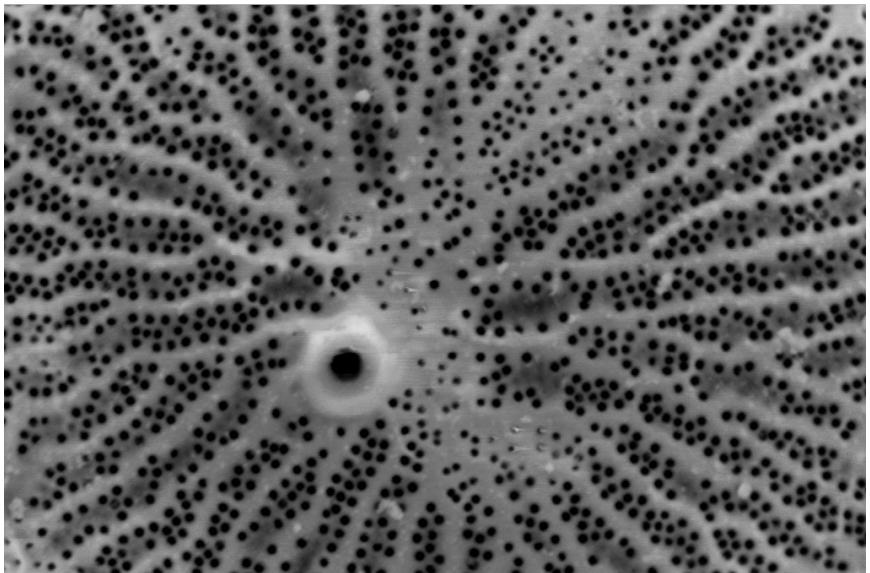
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Wild 021



Wild 023

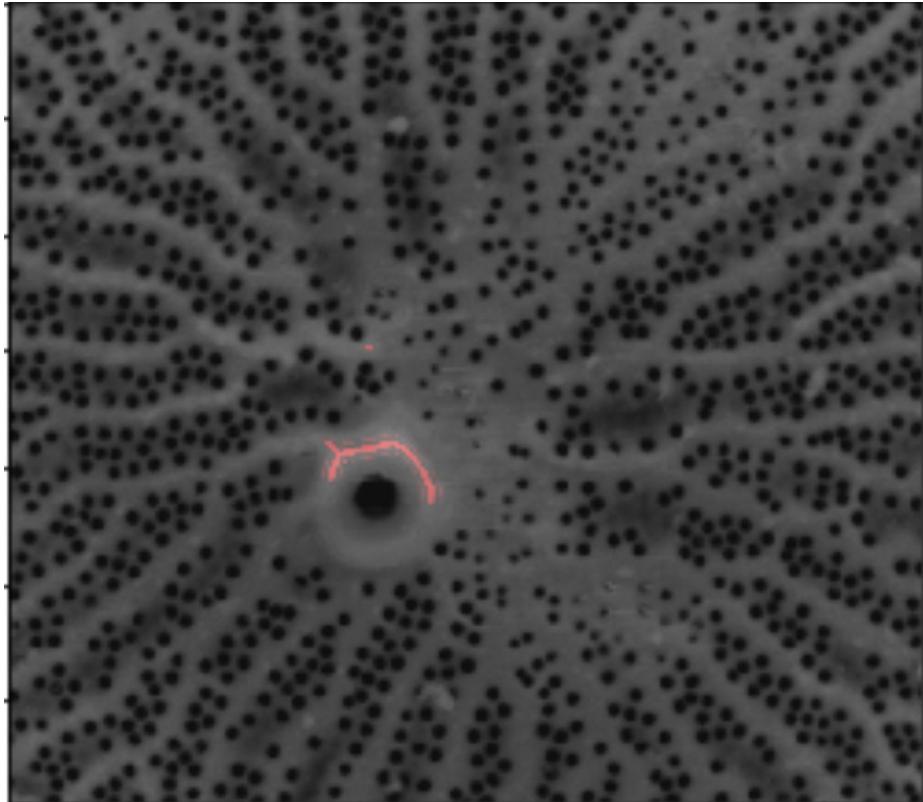


300 nm

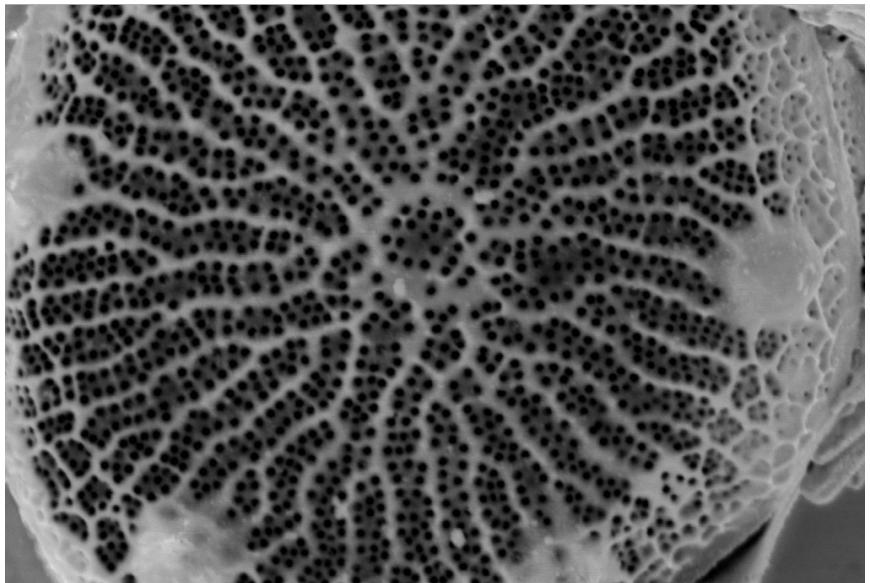
EHT = 1.00 kV
WD = 3.2 mm

Signal A = InLens Date :26 Apr 2018
Mag = 42.00 K X Stage at T = 0.0 °

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Wild 052



300 nm

EHT = 1.00 kV
WD = 3.8 mm

Signal A = InLens Date :25 Apr 2018
Mag = 39.76 K X Stage at T = 0.0 °

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