

Exceptional service in the national interest



Hyperspectral Imaging of Yeast Autofluorescence Analysis of Clinical Isolates

4-29-2015

SAND2015-

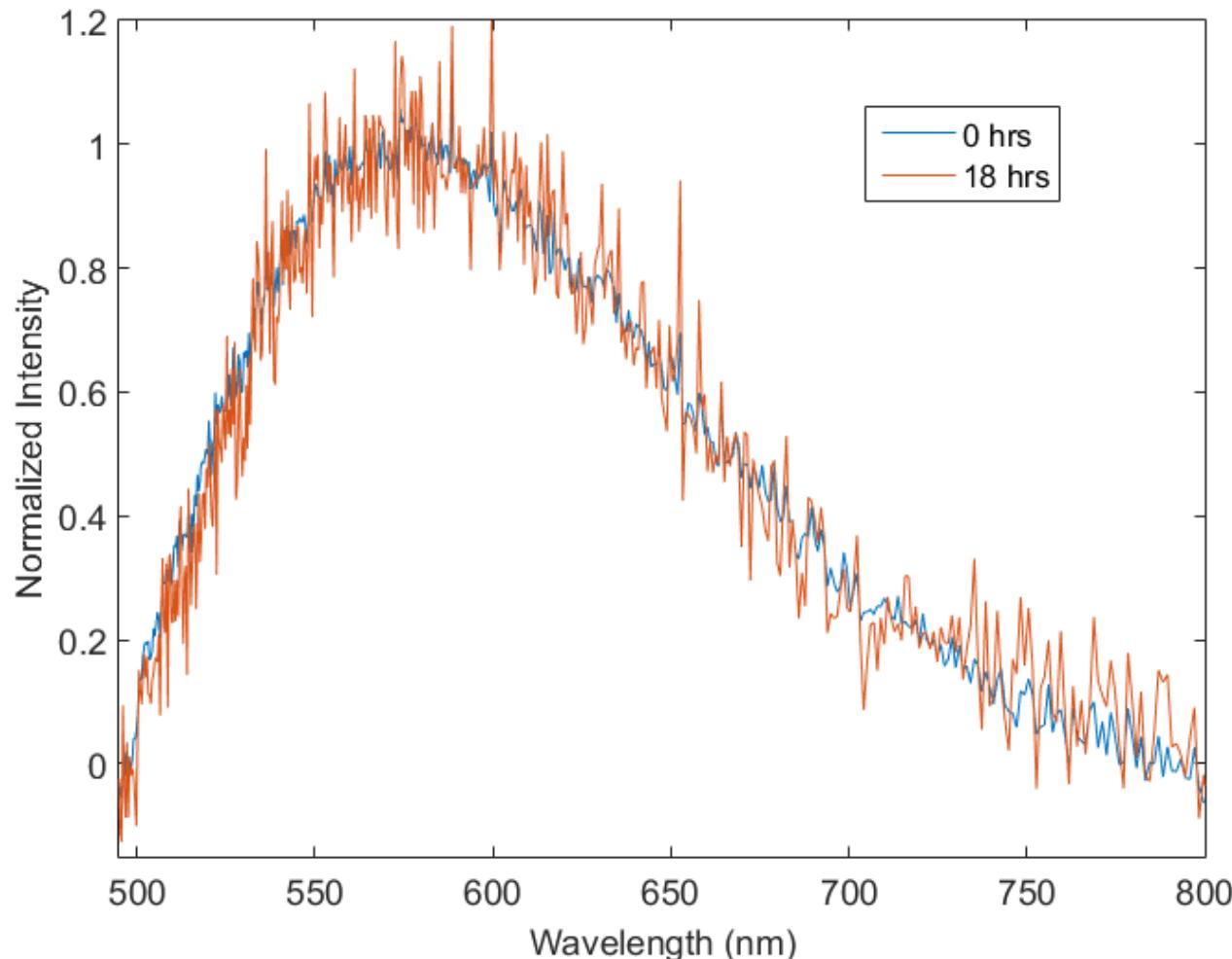


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Experimental Details

- Samples were cultured for 18 hrs in human serum at 37 degrees, with shaking
- Also investigated whether there's a change in the spectral properties of human serum over time (t0 vs T18)
- Due to instrument configuration at the time the samples were run at 2x longer integration time than previous AF imaging (because 2x less laser power – notch filter wheel change)

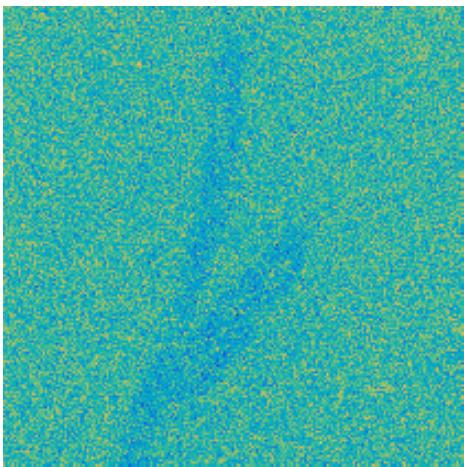
Comparison of Human Serum



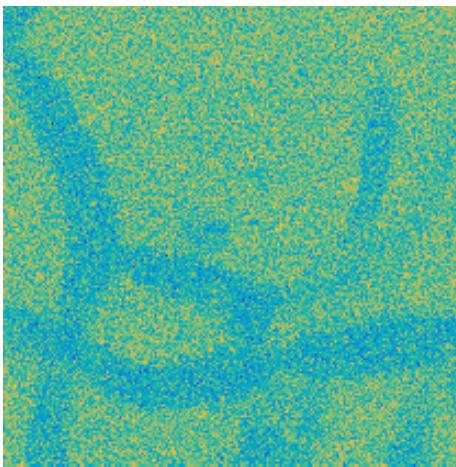
There's no change in the spectrum of human serum after 18 hrs of incubation.

Representative Images

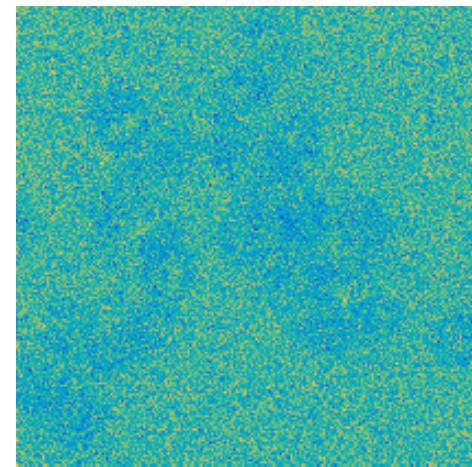
LAB-Alb



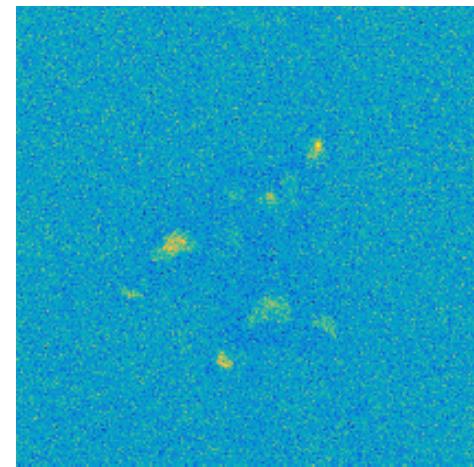
TRL015-Alb



TRL033-Par

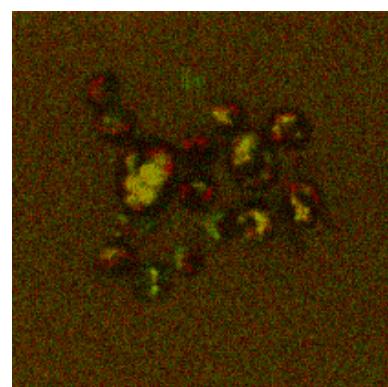
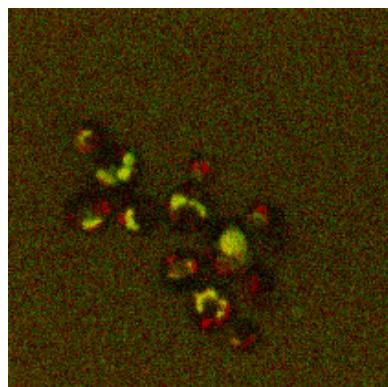
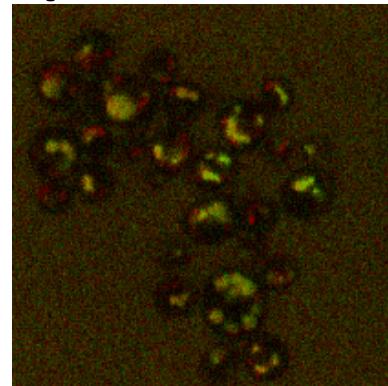
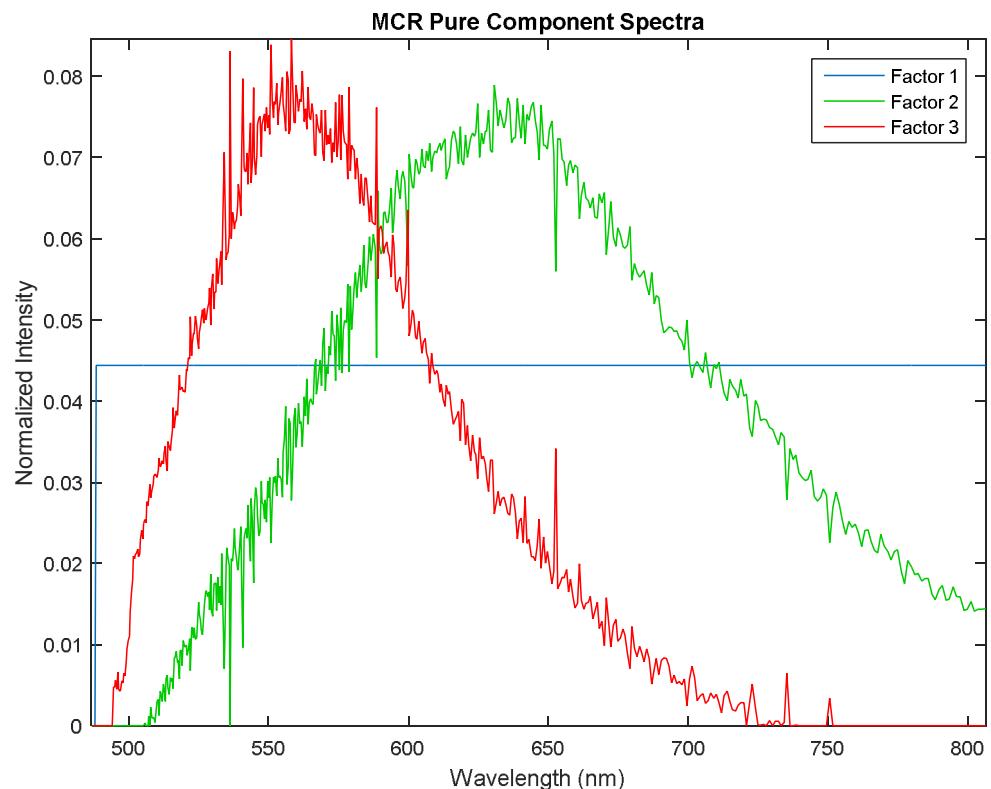


TRL017-Gla



Only *C. glabrata* shows any signal besides background
(even the lab strain of Alb doesn't show anything)

MCR Analysis *C. glabrata* (TRL017)



Note: spikes are not important or relevant to the results. They have to do with a detector uniformity calibration that I did incorrectly. We can update later or smooth the spectra for comparison.