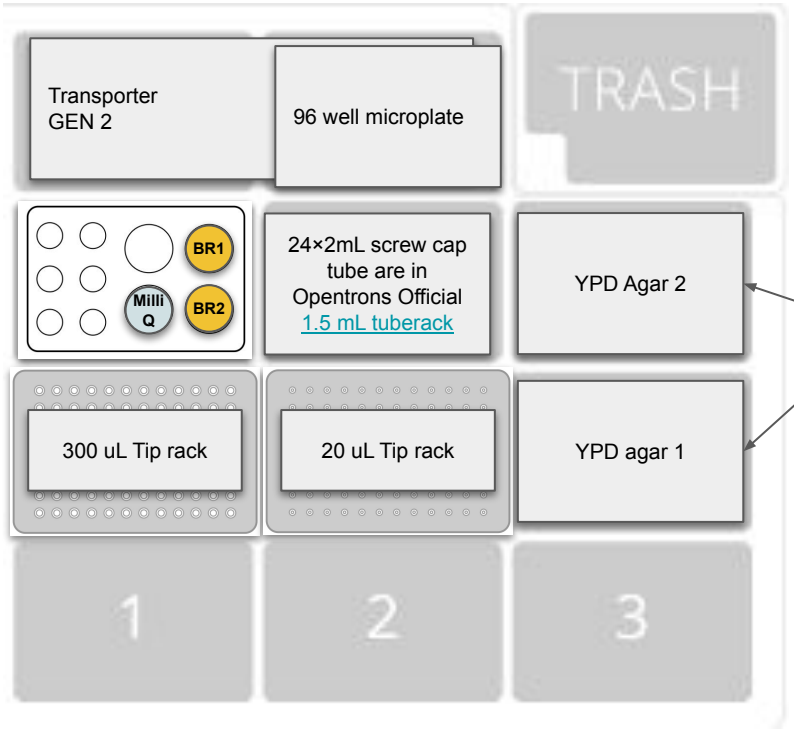
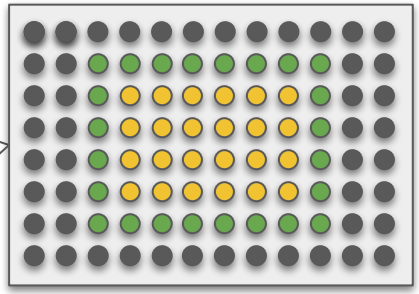
Experimental Design

- OT-2 Protocols : 240117-170044
- Results of RNA-seq : 240328_RNAseq2nd

On OT-2 deck, Labware arrangement

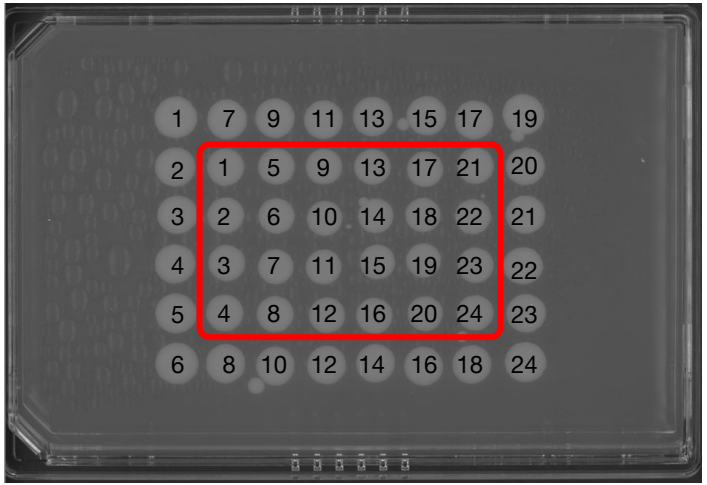


On 96 (8x12) spot design, green spot is for avoid of edge effect. And yellow spot is for quantitative measurement of yeast growth
The spot is start form upper left of yellow spot.

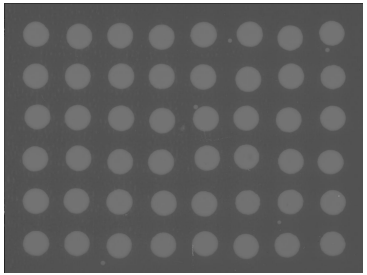


Experimental procedure of spot assay

1-24 are sample numbers. Spots surrounded by the red square are for quantitative growth measurement. Perimeter spots outside the red square are to avoid edge effects.



1. Disinfect the lid of the microplate dish with 70% ethanol.
2. After all spots have dried, place the lid onto the microplate.
3. Place the microplate dishes onto the flatbed scanner in the 30℃ incubator with the agar side facing down.
4. Scan with the following settings:
    a. Resolution: 600 dpi
    b. Duration time: 10 min
    c. Color: grayscale
5. Image preprocessing:
    a. Crop images according to the position of the plate (see top-right image).
    b. Flip the image vertically to match spot positions and sample numbers.
    c. Crop images according to the position of the spots (see bottom-right image).
    d. Rotate images to align them in a matrix format.
6. Quantify growth by Colonyzer and baQFA



Sample_ID [GitHub link for metadata]

Fastq_prefix	Sample_ID	Pipetting_Speed	Biological_Replicates	Technical_Replicates
LAB_465_01_S1_	S01	290	1	1
LAB_465_02_S2_	S02	210	1	1
LAB_465_03_S3_	S03	130	1	1
LAB_465_04_S4_	S04	50	1	1
LAB_465_05_S5_	S05	290	2	1
LAB_465_06_S6_	S06	210	2	1
LAB_465_07_S7_	S07	130	2	1
LAB_465_08_S8_	S08	50	2	1
LAB_465_09_S9_	S09	290	1	2
LAB_465_10_S10_	S10	210	1	2
LAB_465_11_S11_	S11	130	1	2
LAB_465_12_S12_	S12	50	1	2
LAB_465_13_S13_	S13	290	2	2
LAB_465_14_S14_	S14	210	2	2
LAB_465_15_S15_	S15	130	2	2
LAB_465_16_S16_	S16	50	2	2
LAB_465_17_S17_	S17	290	1	3
LAB_465_18_S18_	S18	210	1	3
LAB_465_19_S19_	S19	130	1	3
LAB_465_20_S20_	S20	50	1	3
LAB_465_21_S21_	S21	290	2	3
LAB_465_22_S22_	S22	210	2	3
LAB_465_23_S23_	S23	130	2	3
LAB_465_24_S24_	S24	50	2	3

On Deck 8, Sample labelling of RNA-seq tube