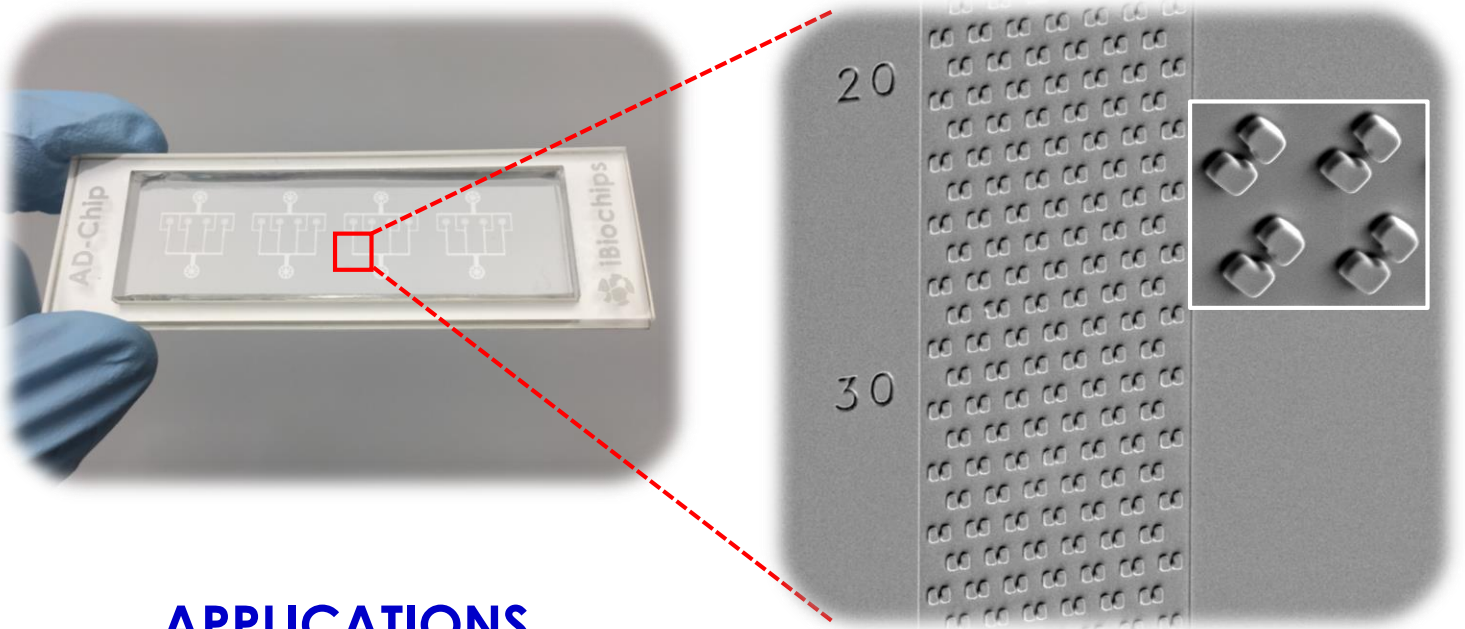


High-throughput Analysis of Yeast-Based Studies



APPLICATIONS

High-Throughput
Replicative Lifespan Assay

Genetic Screening for Longevity
Associated Genes

Proteomic Screening for Protein
Turnover and Relocalization

Nutrient Sensing and
Signaling Pathways



Automated Dissection Chip Features

High-Throughput To Reduce Labor & Time Costs:

Automated whole-lifespan tracking of up to 8,000 single yeast cells for 16 different strains in 3 days

High-Resolution Imaging:

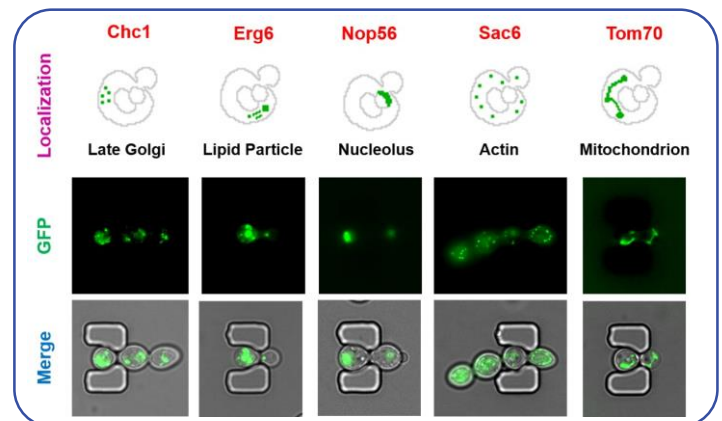
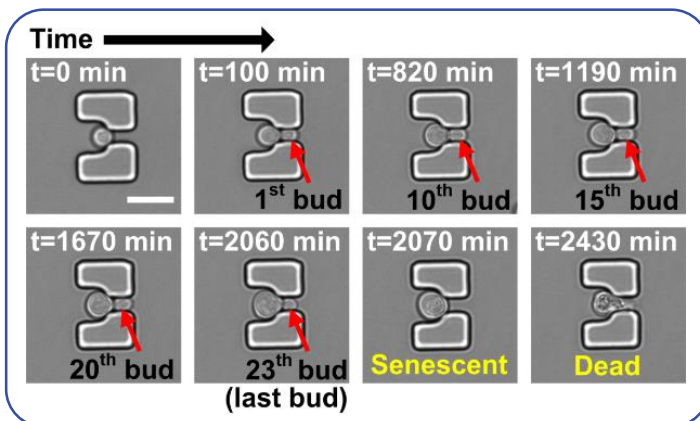
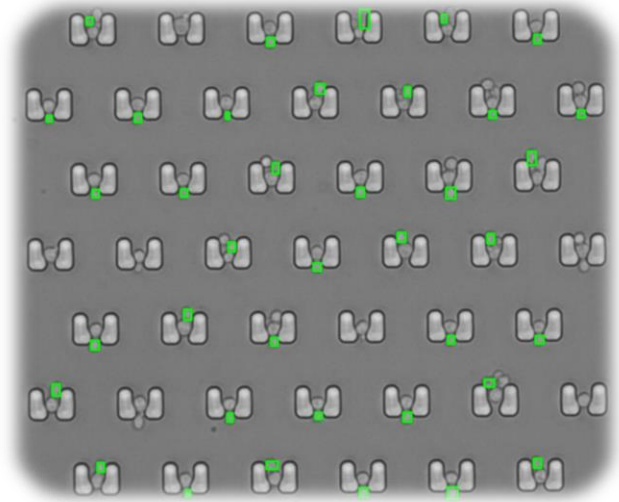
Compatible with continuous high-resolution (fluorescent) imaging of single cells during entire aging process

Maintaining Constant Growth Condition:

Supply of continuous flow of fresh medium, minimizing variations introduced by operators and environment

Time-Lapse Image Analysis Software:

Automatic counting of daughter cells produced by individual mothers (upon request)



Reference: M.C. Jo, et al. "High-throughput analysis of yeast replicative aging using a microfluidic system." *PNAS*, vol. 112 (2015), 9364–9369.

Automated Dissection Chip Specifications

Material	<ul style="list-style-type: none"> • PDMS, PMMA, Glass
Dimensions (L x W x H)	<ul style="list-style-type: none"> • 75 x 25 x 4mm
Substrate	<ul style="list-style-type: none"> • Glass coverslip (0.17mm thickness) allowing up to 100X oil objective
Number of single-cell traps	<ul style="list-style-type: none"> • Total 8,320 (520 traps x 16 chambers)
Number of inlets	<ul style="list-style-type: none"> • 4 media inlets & 16 individual cells inlets