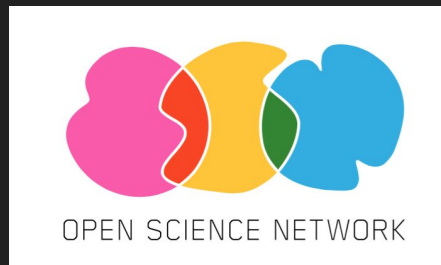


You can engineer biology with the Open Yeast Collection

Living things are factories for making bio-molecules.

Scott Pownall
President & Cofounder, OSN
scott@opensciencenet.org



What is the Open Yeast Collection?

A collection of DNA parts for engineering yeast.

- Free, reusable and redistributable
- Extensible - add your own parts, adapt to other species
- Useful for community bio, education, research or industry

Designed by



& collaborators!

Synthesised by



Distributed under



Funded by



- 19 Yeast Promoters
- 14 Genes (CDS), 2 Secretion tags, 1 nuclear localization signal
- 9 Yeast Terminators
- 8 Yeast Selection Markers
- 7 Pairs of homology regions for genome integration
- 3 Yeast Origins
- 1 Origin of Transfer
- 7 Pairs of Assembly Connectors for multi-gene assembly
- 4 E. coli selection and origins parts
- 3 Optional assembly bridges

What what are the DNA Parts?



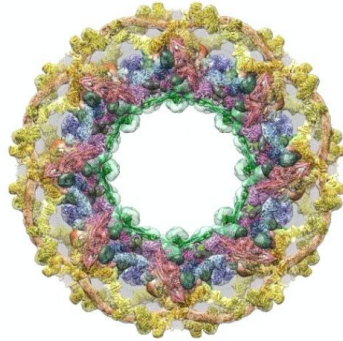
Isaac Larkin
Keoni Gandall
Hannah Elaine Verdonk
Grace Li-Na Su



STANFORD.FREEGENES.ORG

Open Bioeconomy
Genes, Plasmids, etc.

Organismal
Development Kits



Open Yeast Collection

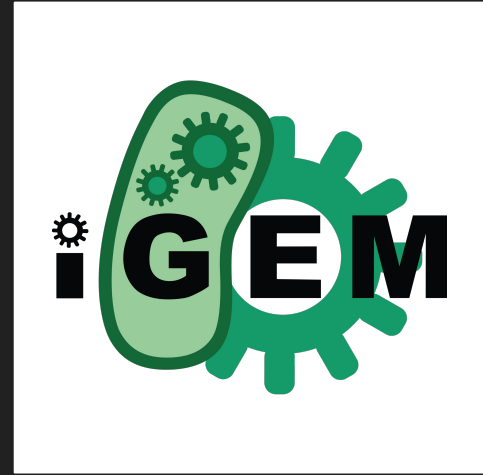
\$0.00

Free Shipping

ADD TO CART

<https://stanford.freegenes.org/>

- Drew Endy
- Keoni Gandall
- Hannah Elaine Verdonk
- Grace Li-Na Su
- Isaac Larkin
- Jenny Molloy & Open BioEconomy Team

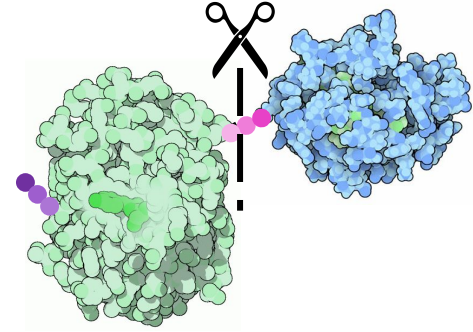


Gratitude

- Working with the Open Yeast Collection
 - *Tomorrow* at 1:00 - 1:45 pm EST
 - MITOCHONDRIA Room
- Join Friendzymes
- Reagent Collaboration Network

How to Get Involved

Open Enzyme Collection



Promoter

Tag

Reporter

Cleave

CDS

Terminator

His
Silica
Cellulose

10

Chromoproteins
Fluorescent proteins
Enzymatic

31

Inteins
TEV
SUMO

5

Polymerases
Ligases
Reverse Transcriptases

>60

Designed by



OPEN BIOECONOMY
LAB
& many collaborators!

Synthesised by



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SHUTTLEWORTH
FOUNDATION

EPSRC

Engineering and Physical Sciences
Research Council



A GLOBAL COLLABORATION FOR EQUITABLE ACCESS
TO BIOTECHNOLOGY

Reagent Collaboration Network



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publicdomaingazette.org

