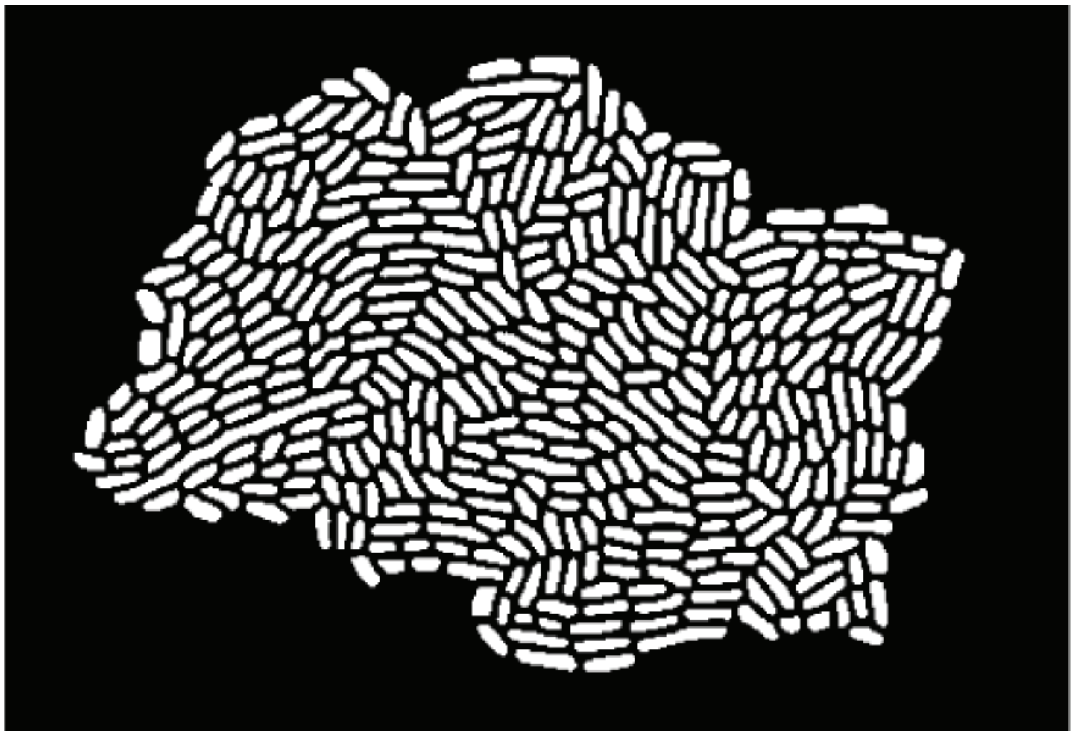
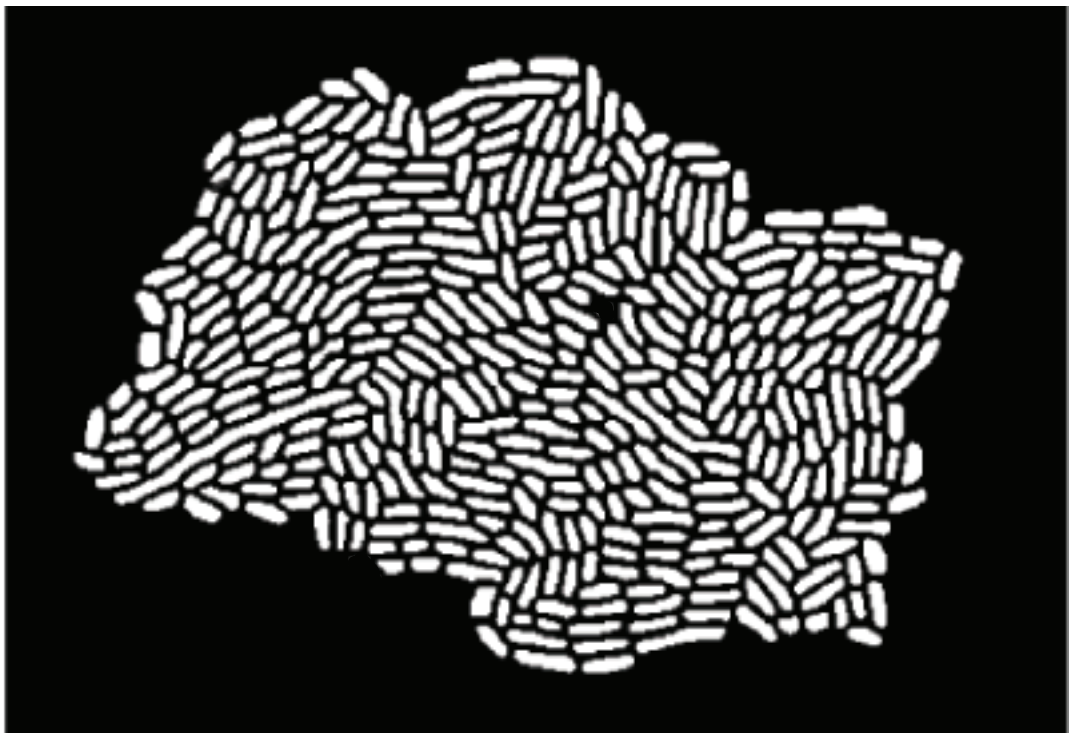
the DELTA

coloring and activity book

Ground Truth

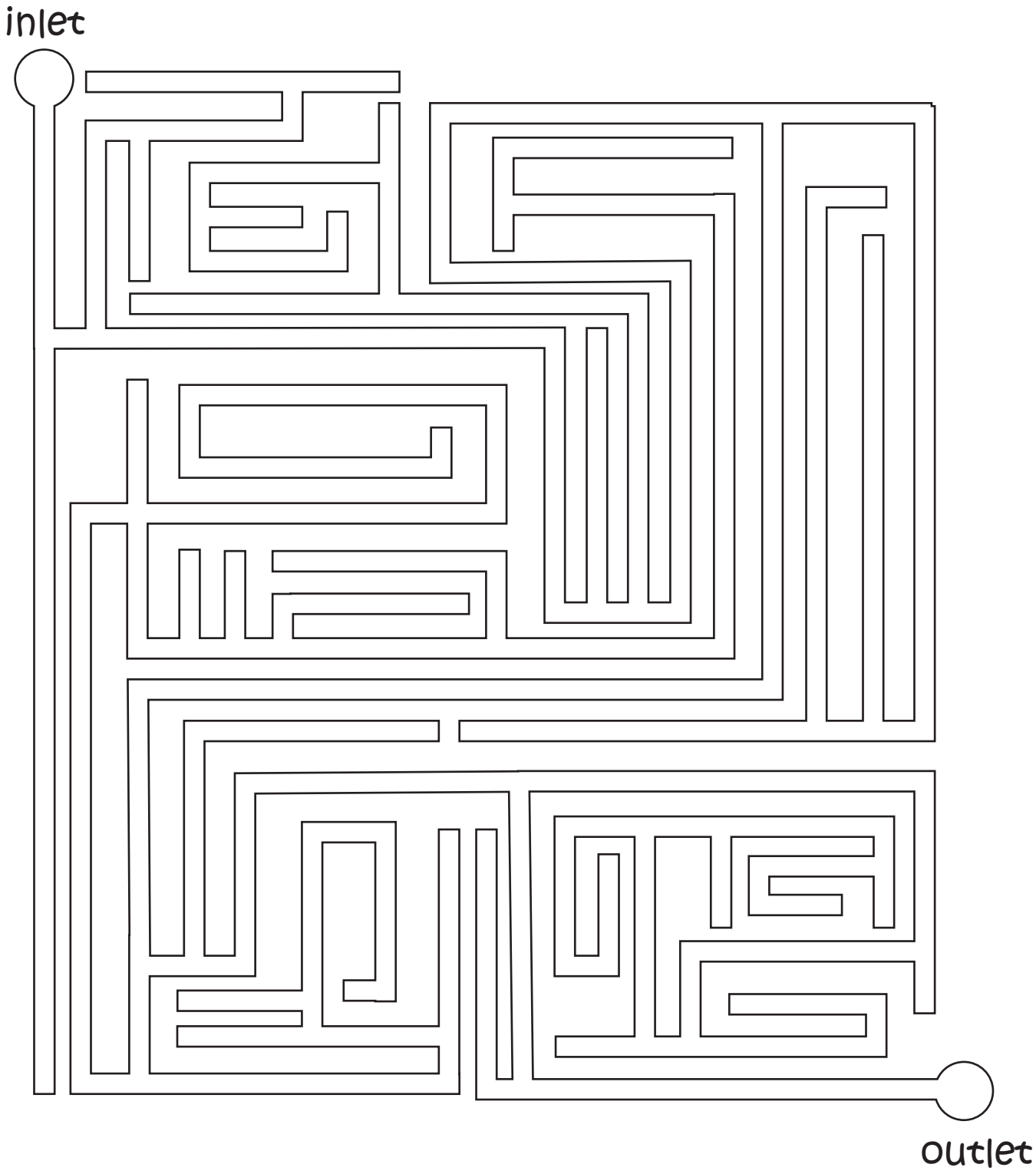
Can you spot 5 differences between the two images?





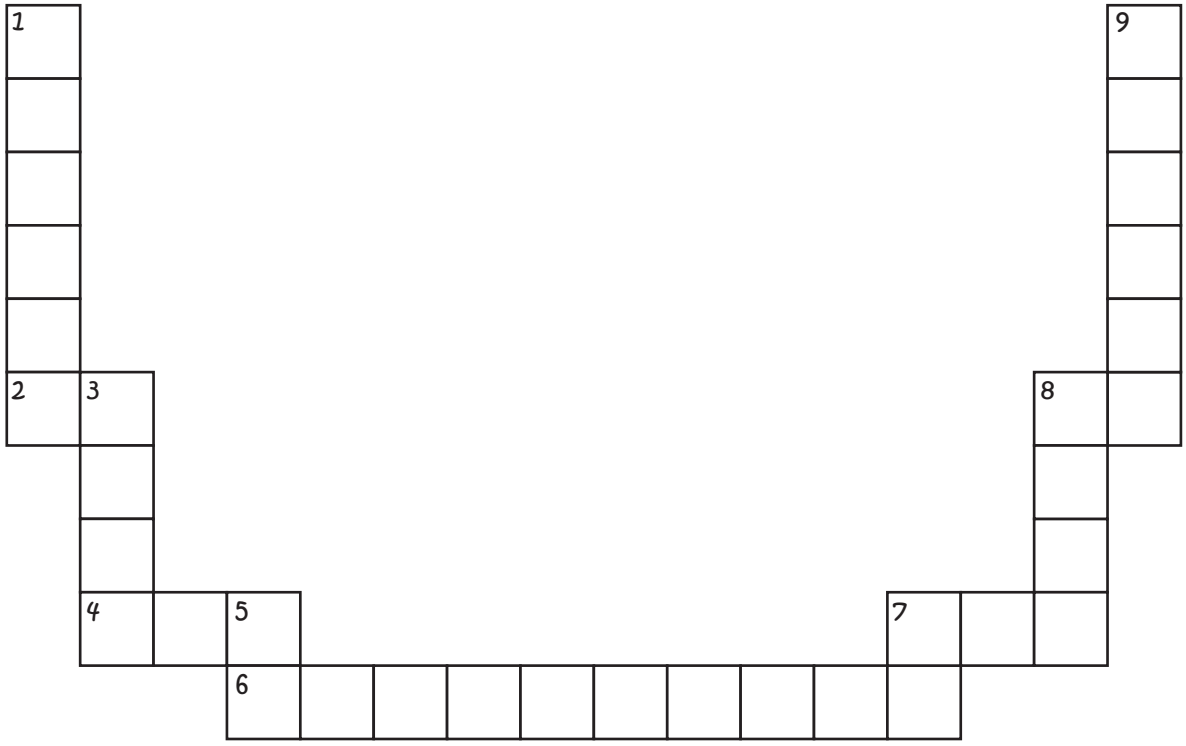
Microfluidics Maze

Find your way from the inlet to the outlet!



U-Net Crossword

Fill in the boxes based on the clues!



Across

2. Author of the original DeLTA paper.

4. DeLTA will run faster if you run it through here!

7. You don't want to find one of these in your code.

6. A helpful Python library for machine learning.

8. Call them at work if your computer crashes.

Down

1. A Java-based image processing program

3. 8 of them make up a byte.

5. A type of medical scan that a U-net might help you analyze.

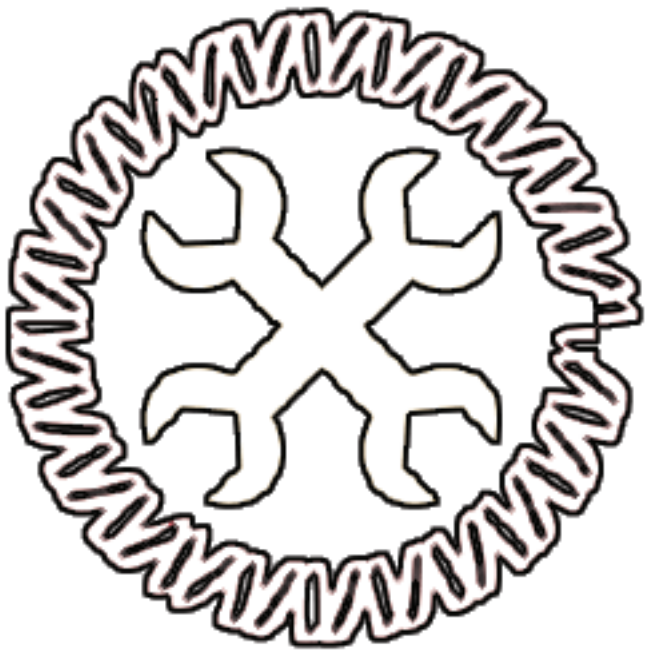
7. An alternative to MG1655.

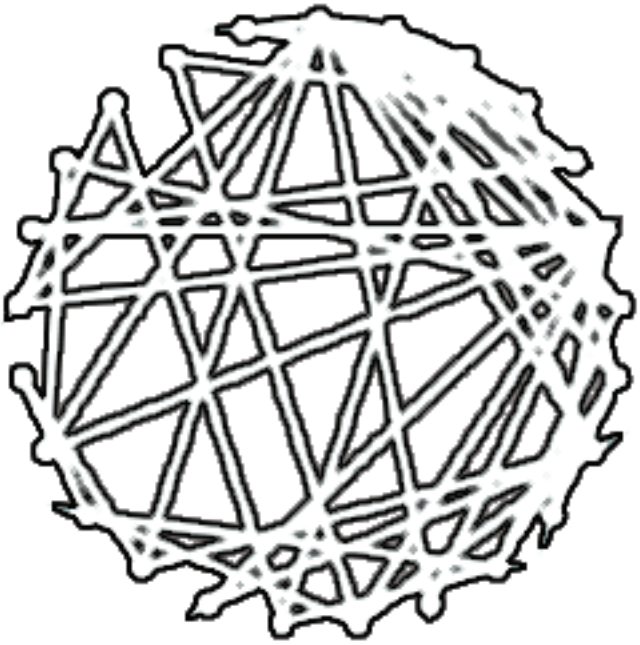
8. A common inducer.

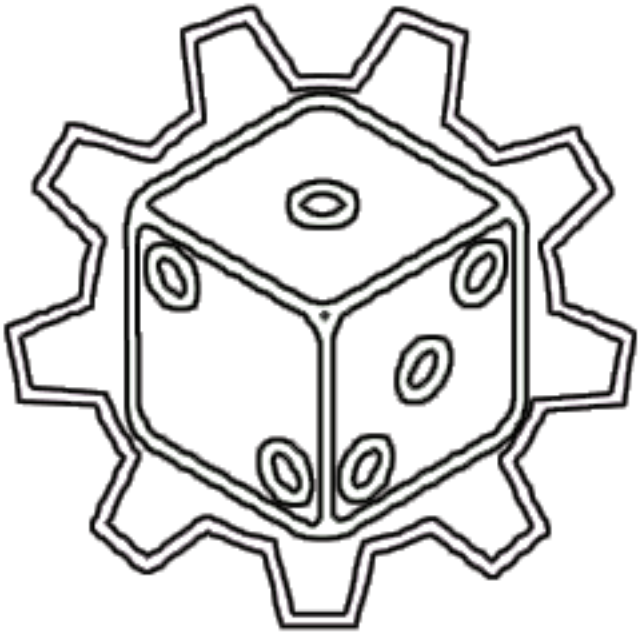
9. Don't forget to do this after your GITlab edits are complete.

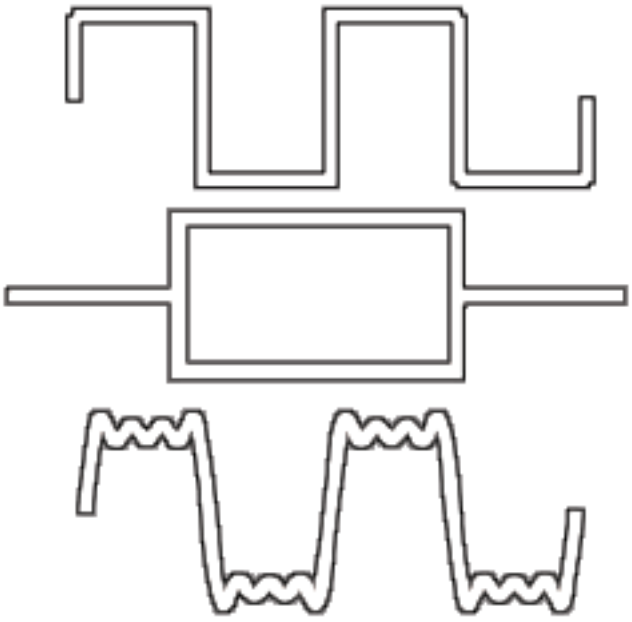
Represent!

Color the Dunlop Lab logo:









Segmentation

Can you match each cell to its DeLTA output?

Family Portrait

Color the segmented cells on the agar pad

Deconvolution

Unscramble the deep learning and synthetic biology related terms!

inboceoymo _ _ _ _ _ _ _ _ _ _

riateuhcetcr _ _ _ _ _ _ _ _ _ _

eadtrghu lelc _ _ _ _ _ _ _ _ _ _ _ _

saCRc _ _ _ _ _

mladpsi _ _ _ _ _ _ _

ecopnrpetr _ _ _ _ _ _ _ _ _ _

goepesthotic _ _ _ _ _ _ _ _ _ _ _ _

icrntreeofmne _ _ _ _ _ _ _ _ _ _ _ _

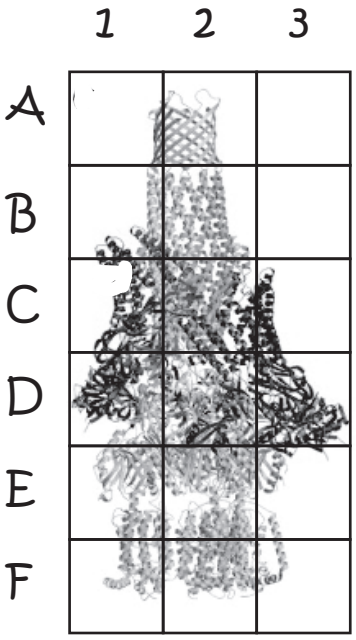
sols onuthfci _ _ _ _ _ _ _ _ _ _ _ _

tncatibiio ceasnrtise _

Upsampling

Use the grid to draw your own TolC efflux pump!

	1	2	3
A			
B			
C			
D			
E			
F			



O NO. O NO. O NO NO NO NO NO.

Find the daughters with the listed combinations of old and new poles!

O N N O N O N N O N N O N N O N
N O N N N O O N N O O N N O O N
O N N N O N N O N O N N O N N O
O N O N O N N O N O N O N N O N
O O O N N O N N O O N N O O N N
N O N N O O N N O N N O O N N O
O N O O N O N O O N O N O O N O
N N O O N O N O O N O N O O N O
N O O N N O O N N O O N N O O N
O N N O O N N O N N O O N N O N
N O N N N O N N O N N O O N N O
O N O N O N N O N O N O N N O N
N O N N O N N O N O N N O N N O
O O N N O O N N O O N N O O N N
N O O N N O O O N N O N N O O N

Word bank:

OOONNNN

ONONOOO

ONONONNO

OONNOON

ONNNOONN

ONOONONOONO

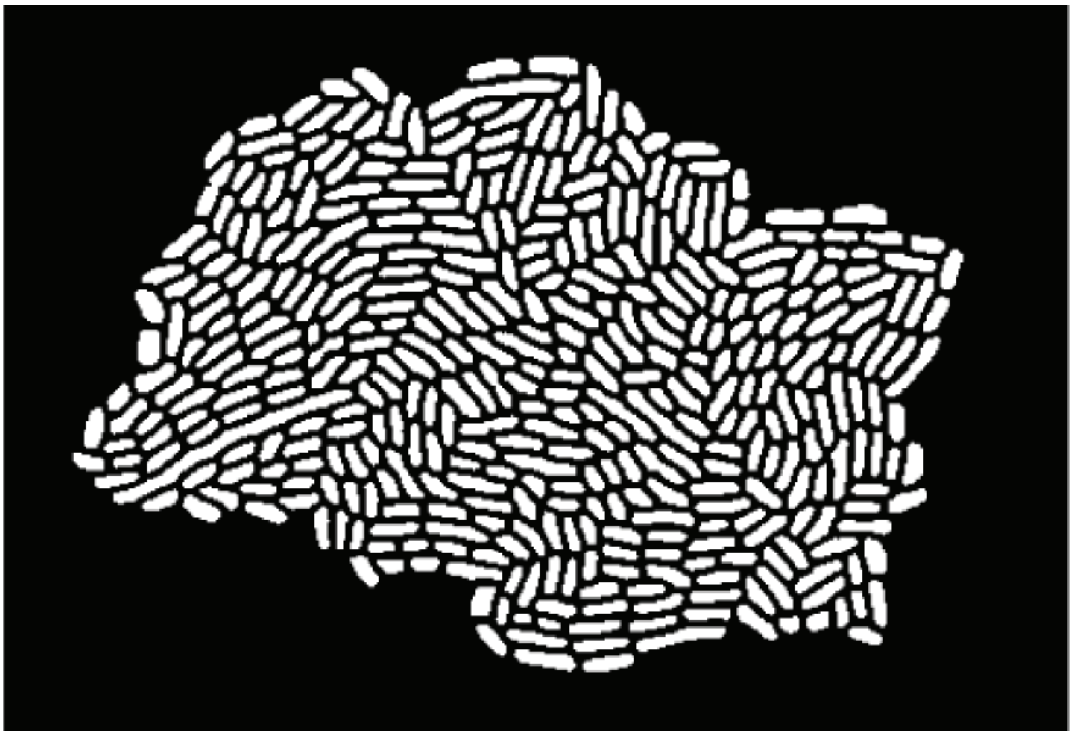
NONNNNO

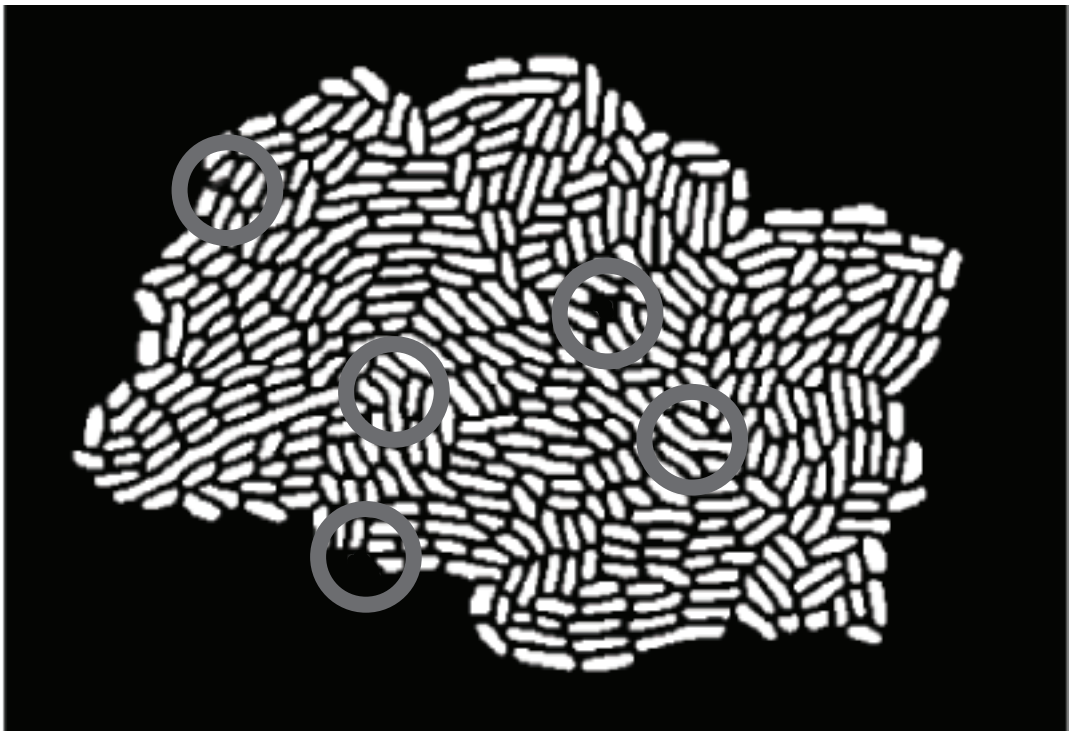
ONNNONNO

Validation Set (solutions)

Ground Truth (solution)

Can you spot 5 differences between the two images?





Microfluidics Maze (solution)

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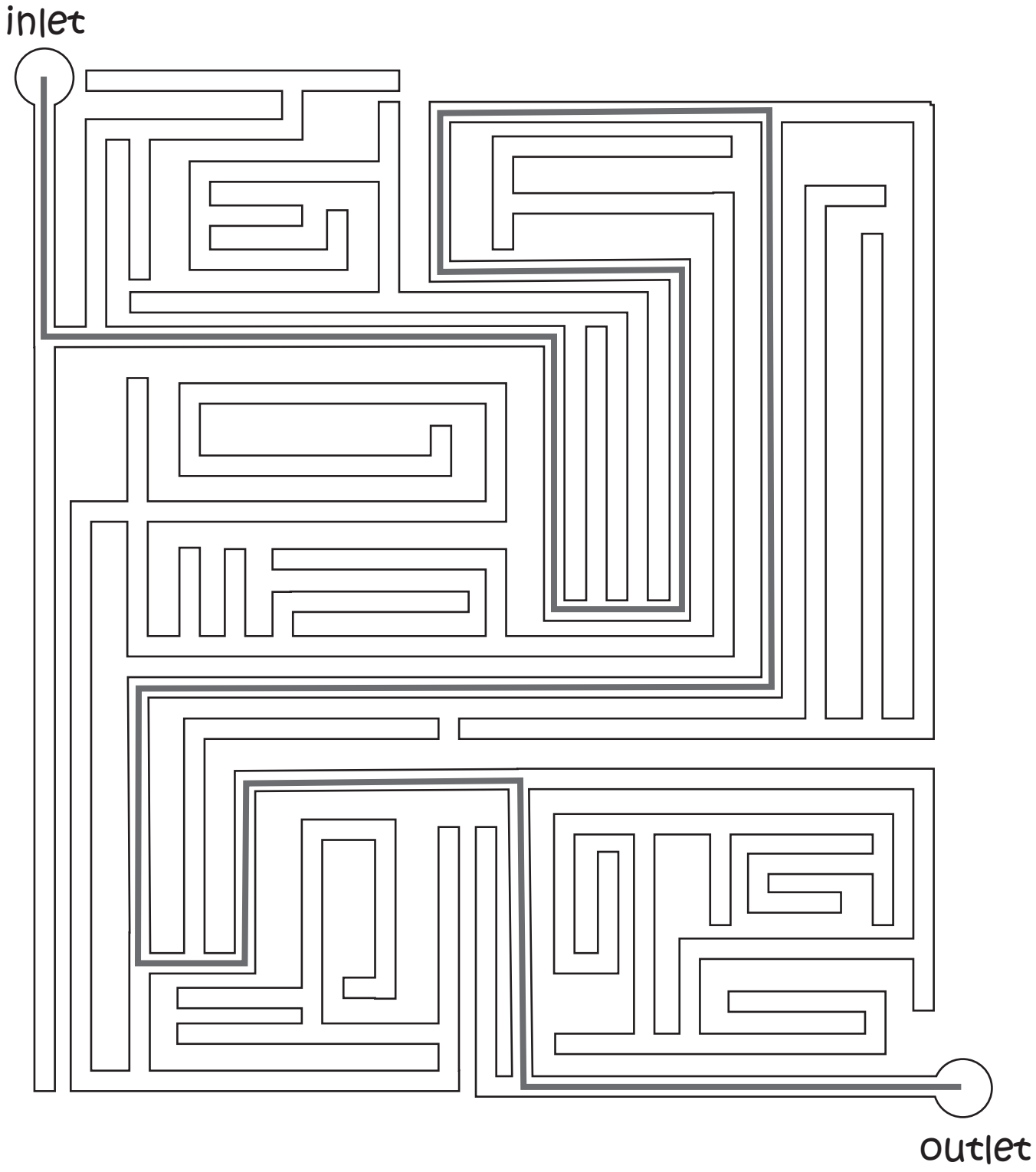

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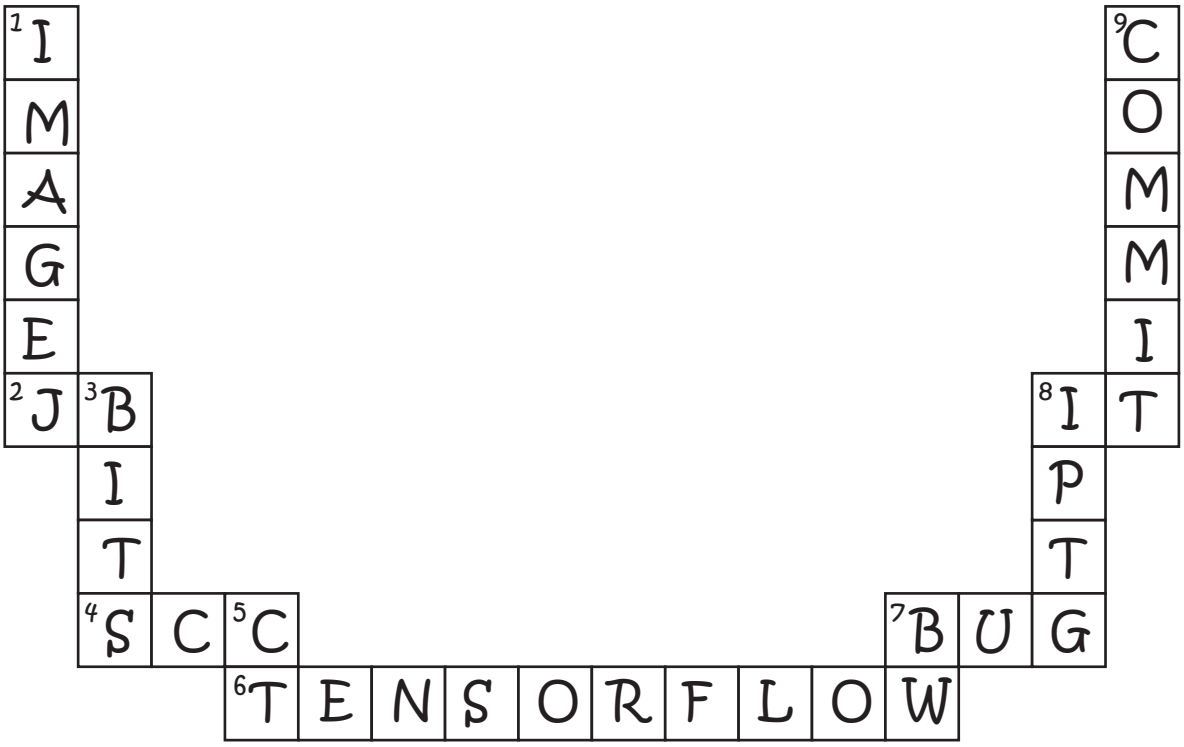

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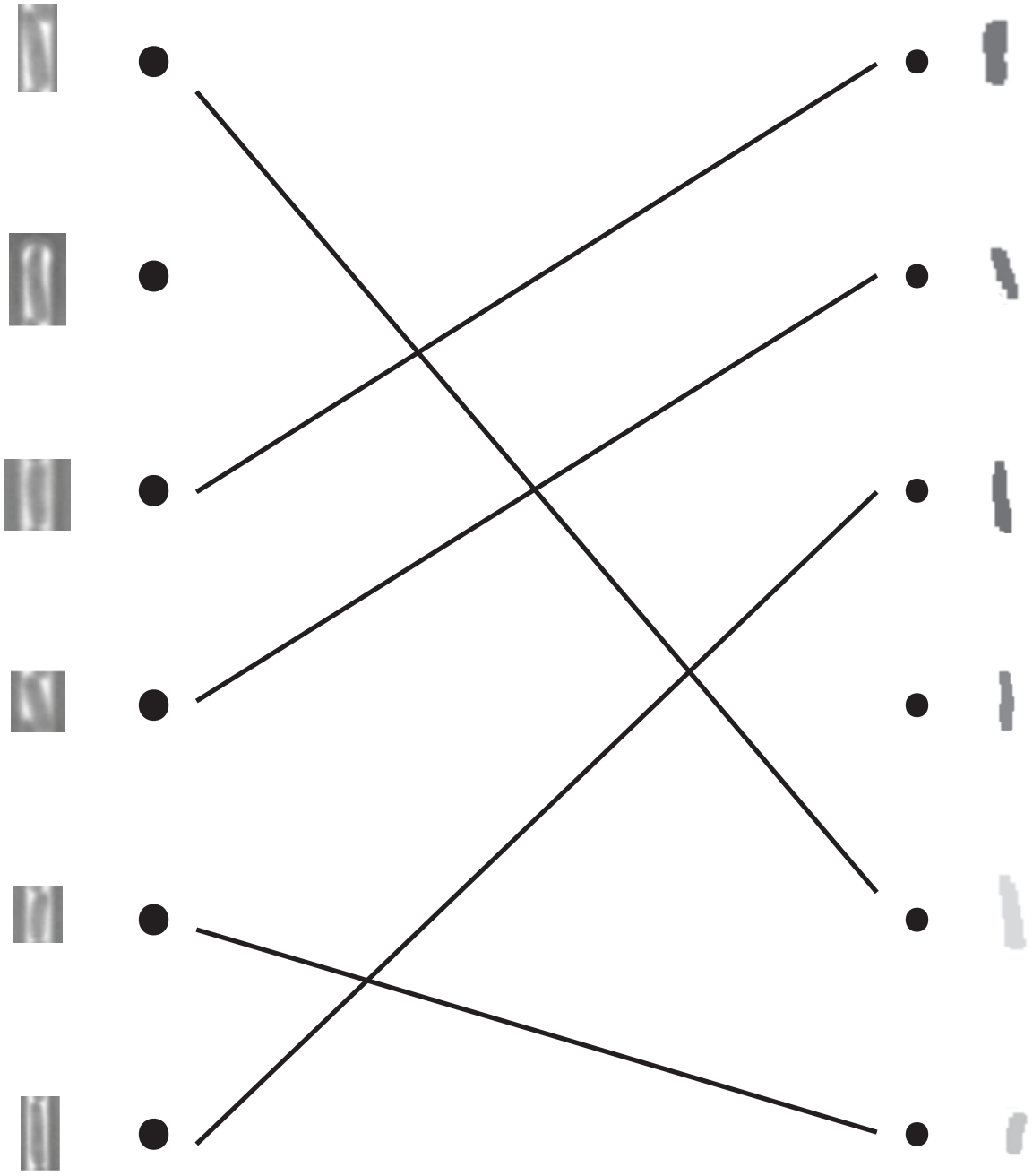


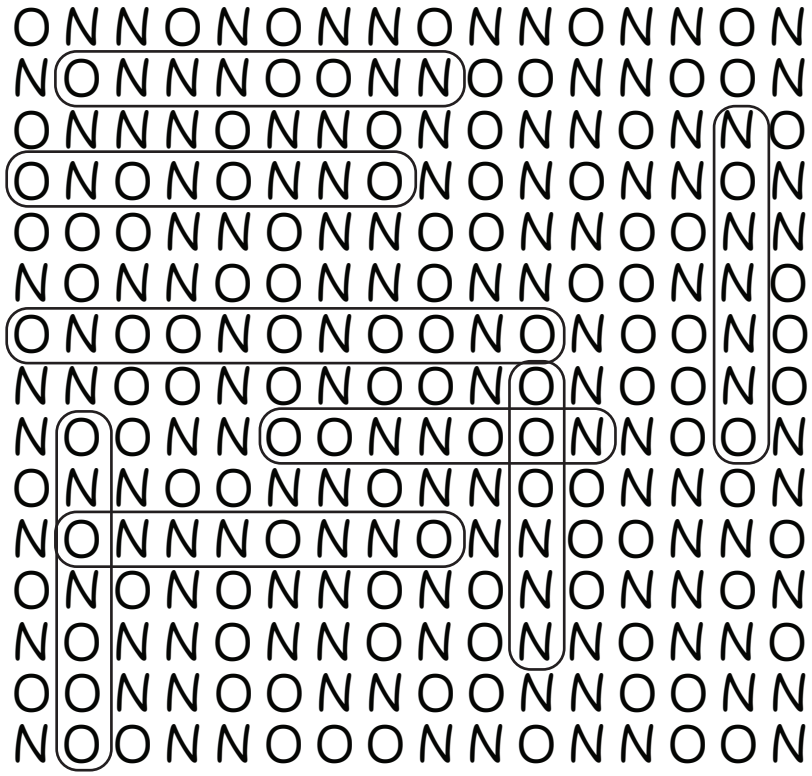
Deconvolution (solutions)

Unscramble the deep learning and synthetic biology related terms!

inboceoymo	bioeconomy
riateuhcetcr	architecture
eadtrghu lelc	daughter cell
SaCRc	CcaSR
mladpsi	plasmid
ecopnrpetr	perceptron
goepestnotic	optogenetics
icrntreeofmne	reinforcement
sols onutnfci	loss function
tncatibiio ceasnrtise	antibiotic resistance

O NO. O NO. O NO NO NO NO NO.

Find the daughters with the listed combinations of old and new poles!



Word bank:

OOONNNN

ONONOOO

ONONONNO

OONNOON

ONNNOONN

ONOONONOONO

NONNNNO

ONNNONNO