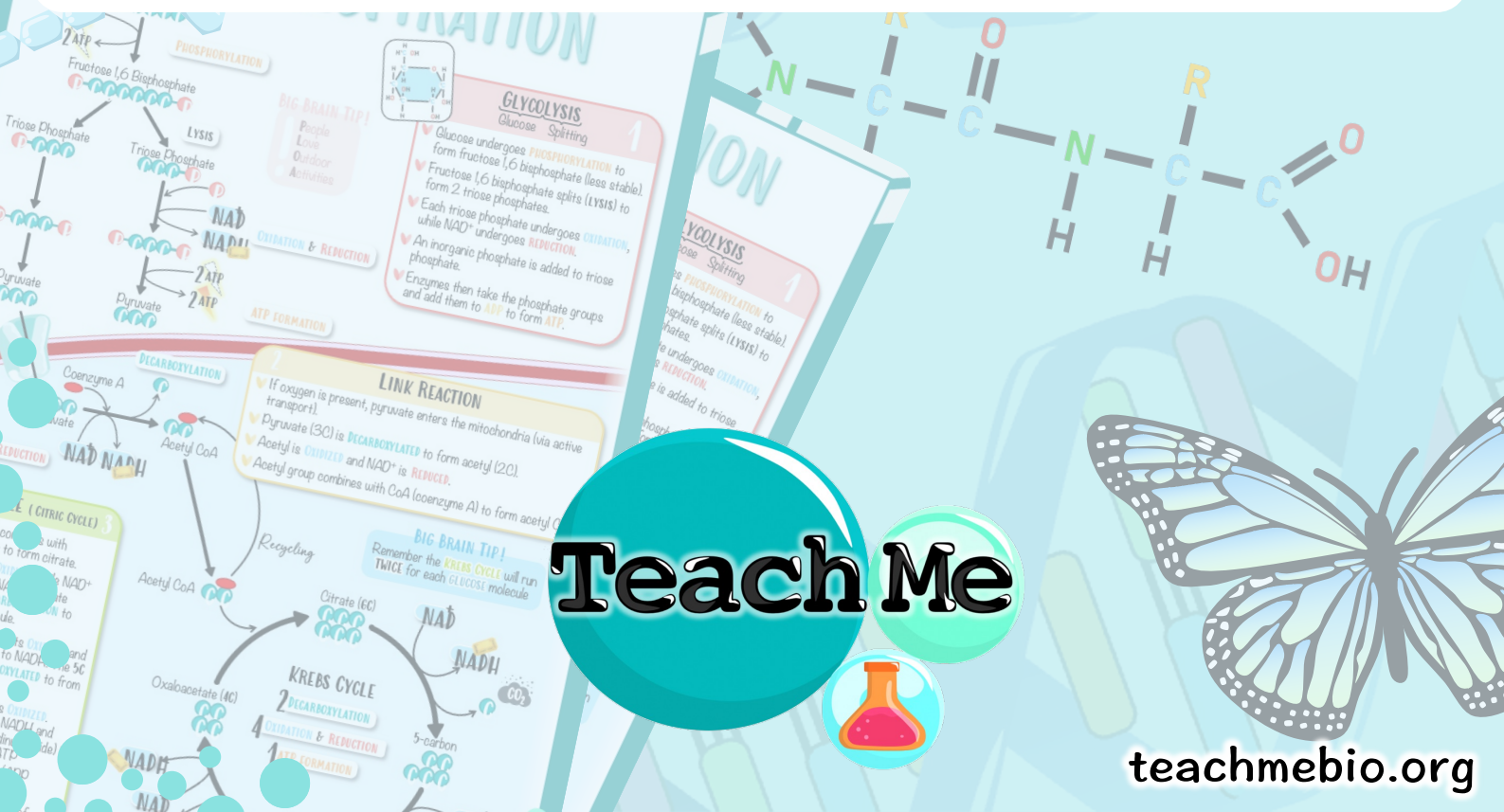


TeachMe

STUDY NOTES

UNIT 2 - CELLS

2.1 CELL STRUCTURE & FUNCTION



CELL STRUCTURE & FUNCTION

Cells are the **building blocks of life**. Understanding cells helps us explain health, disease, and life itself — from how bacteria cause illness to how our own cells specialize to form tissues.

What is a cell?

CELL — The basic unit of all **LIVING** organisms.

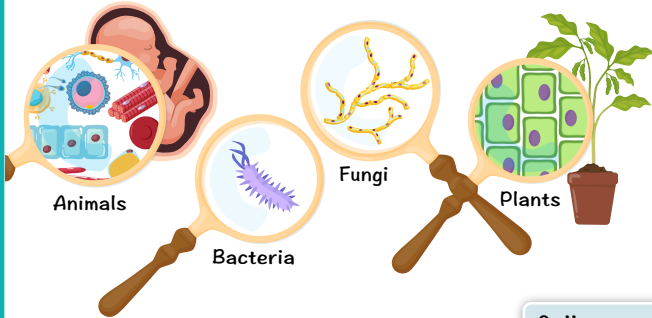
It is a distinguishing feature between the living and non-living (you and I are both made up of cells, but a rock for example isn't).

The **CELL THEORY** is a set of three fundamental principles that describe the role of cells in all living organisms:

THE CELL THEORY

1. All living organisms are made up of one or more cell.

From animals to plants to the fungi on your ceiling to the smallest bacteria making you sick. They are all made up of cells.



2.

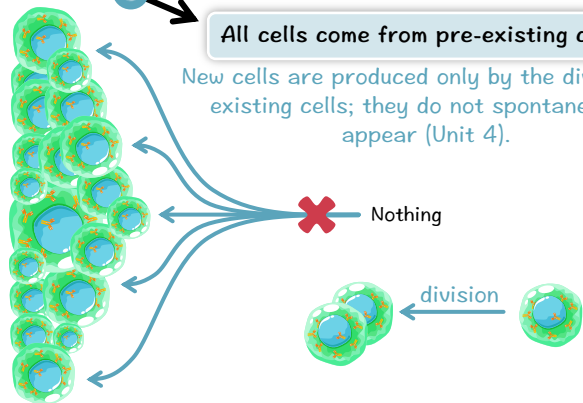
Cells are the smallest unit of LIFE.

Anything is considered living if they can carry out ALL the functions of life

3.

All cells come from pre-existing cells.

New cells are produced only by the division of existing cells; they do not spontaneously appear (Unit 4).



BIG BRAIN TIP!

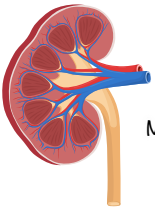
Cell Theory & the 7 Functions of Life are **KEY CONCEPTS** for the exams!

DID YOU KNOW?

We have over **200** types of cells in our bodies, with a total of approximately **37,000,000,000,000** (37 trillion) cells.

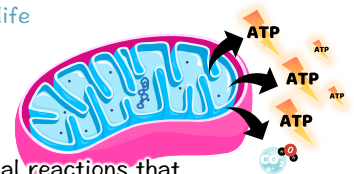
HOMEOSTASIS

Maintenance of a constant internal environment.



METABOLISM

The sum of all the chemical reactions that occur within an organism.



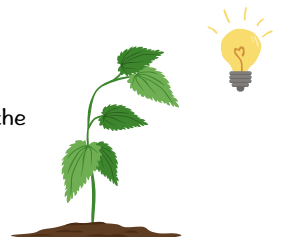
NUTRITION

The ability to acquire the energy and materials needed to maintain life.



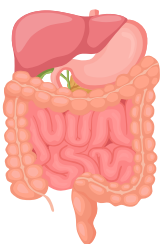
RESPONSE

As the environment changes, the organism adapts.



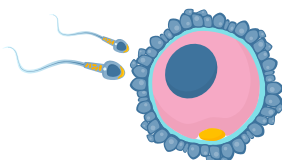
EXCRETION

The ability to release materials not needed or harmful into the surrounding environment.



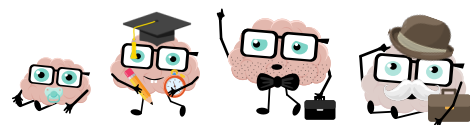
REPRODUCTION

The ability to produce offspring.



GROWTH

The development of an organism.



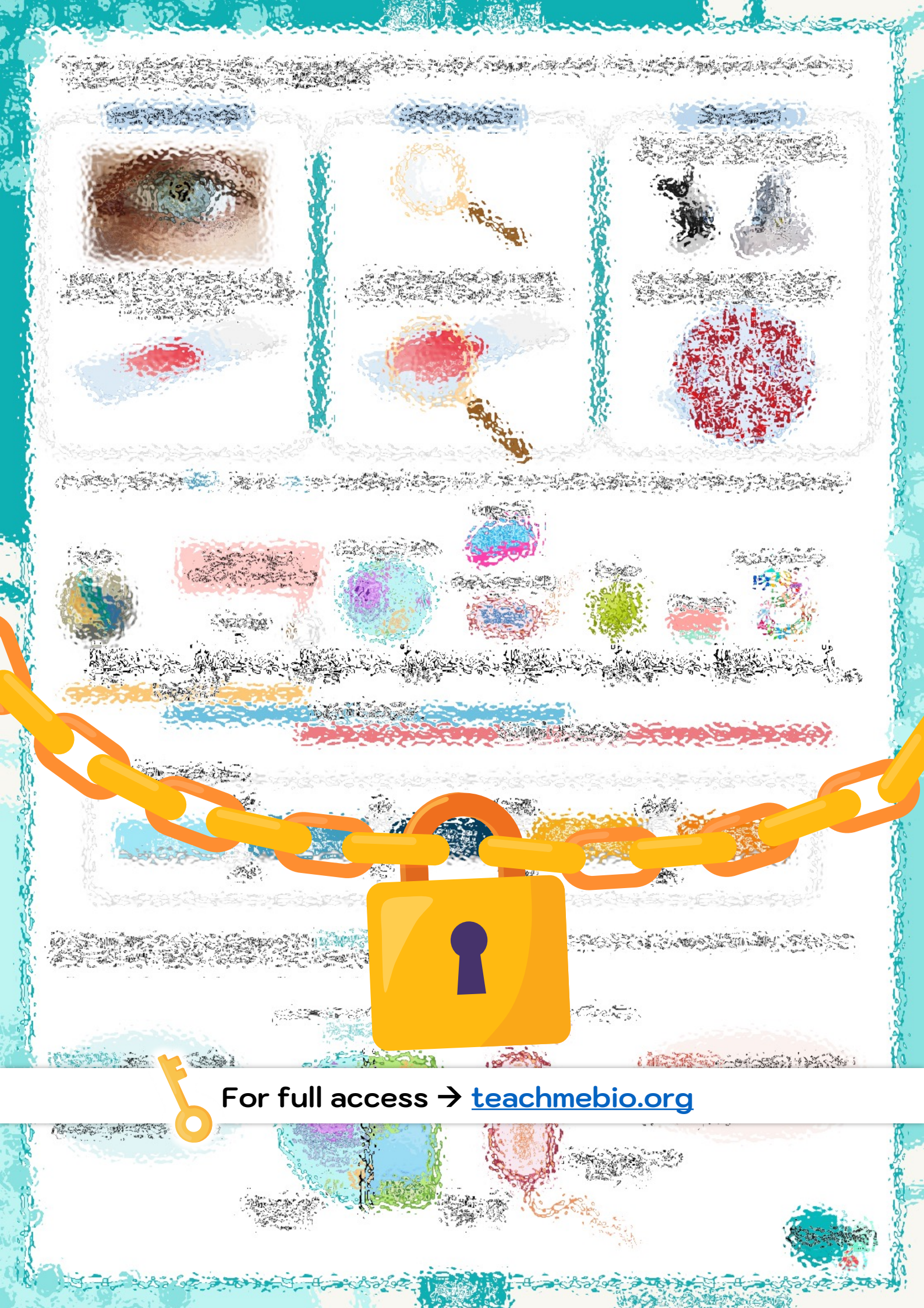
EXCEPT...

Viruses are considered **NON-LIVING** as they **cannot** carry out the functions of life

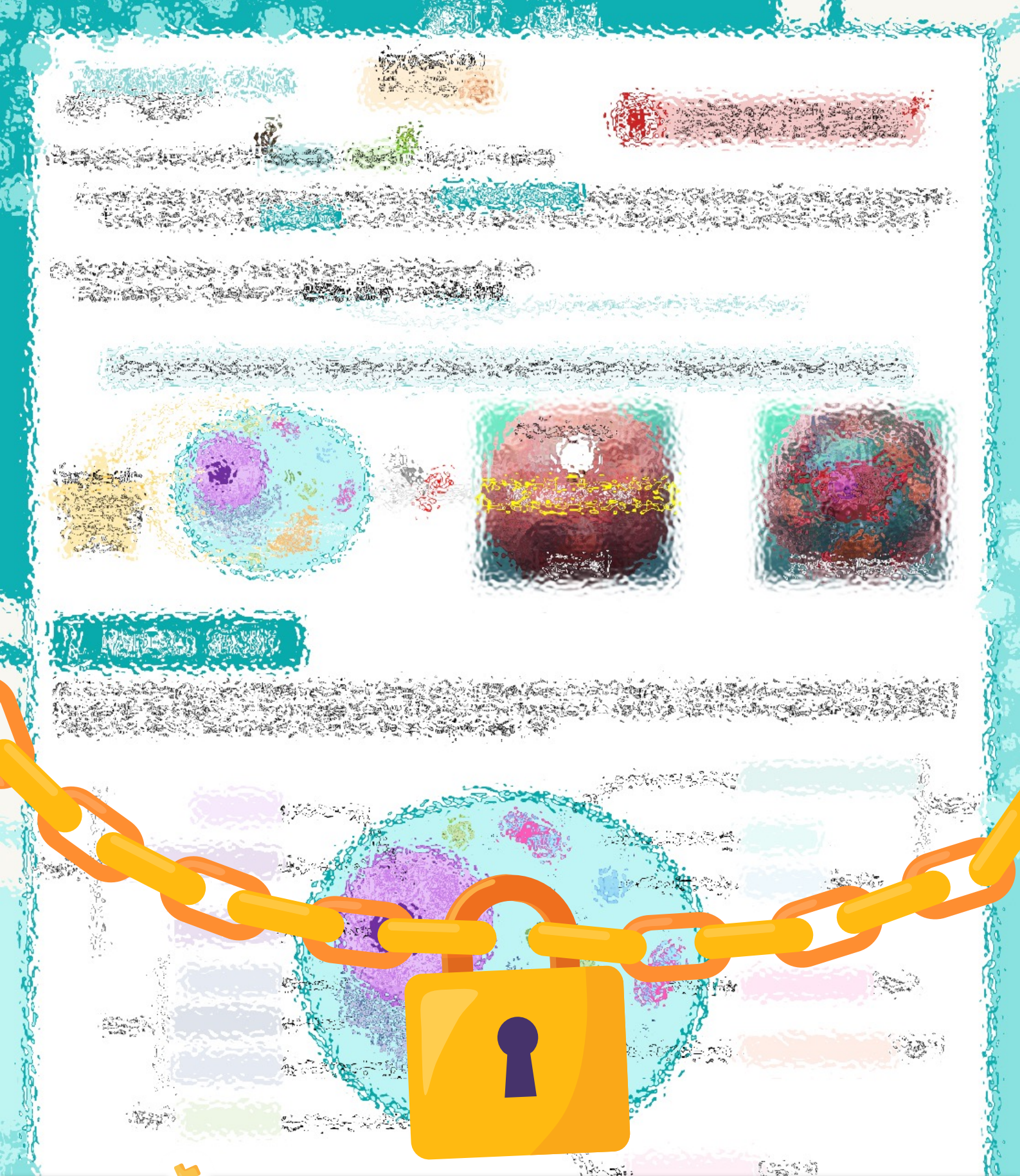


BIG BRAIN TIP!

Hi Mr. Green!



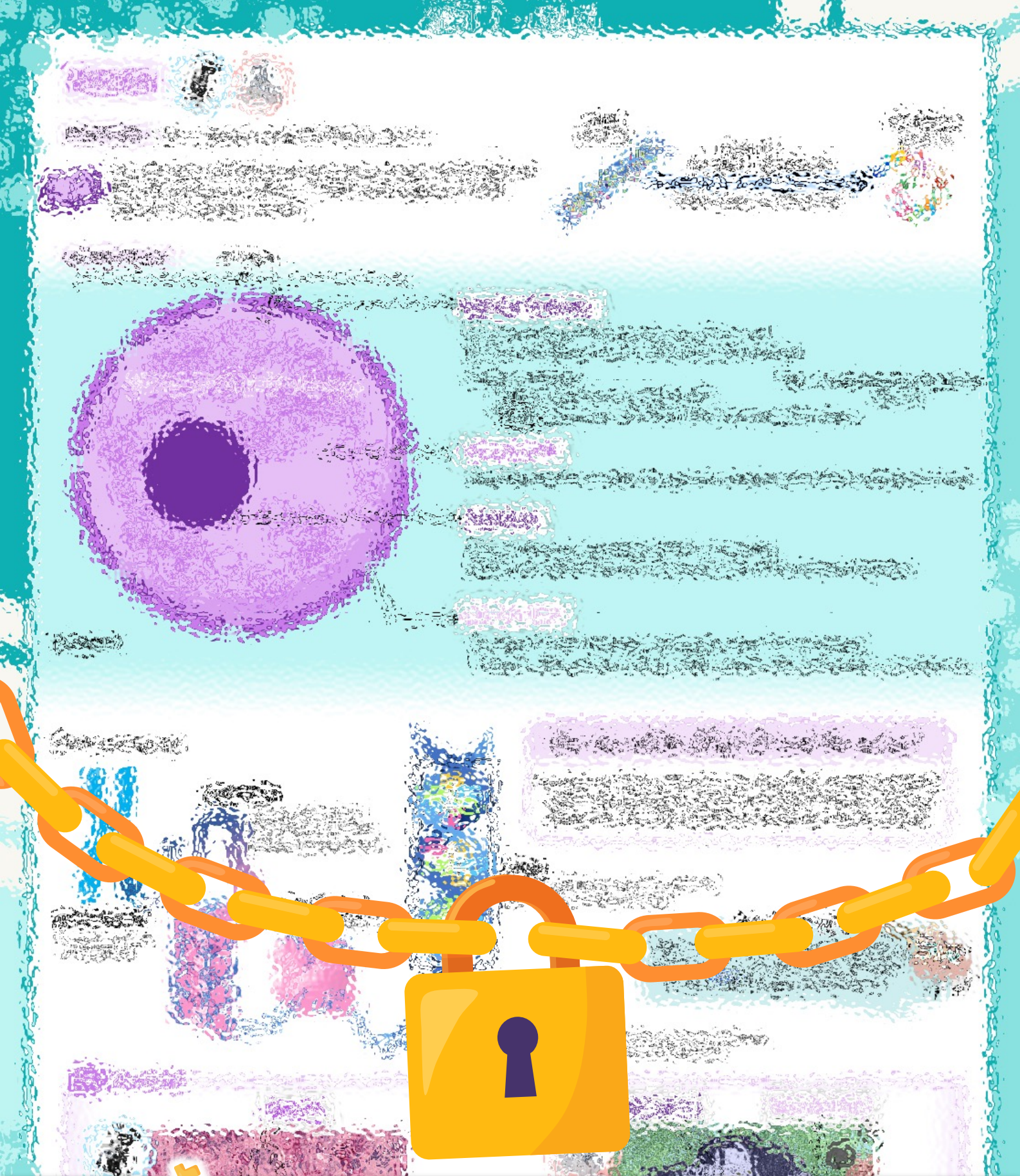
For full access → teachmebio.org



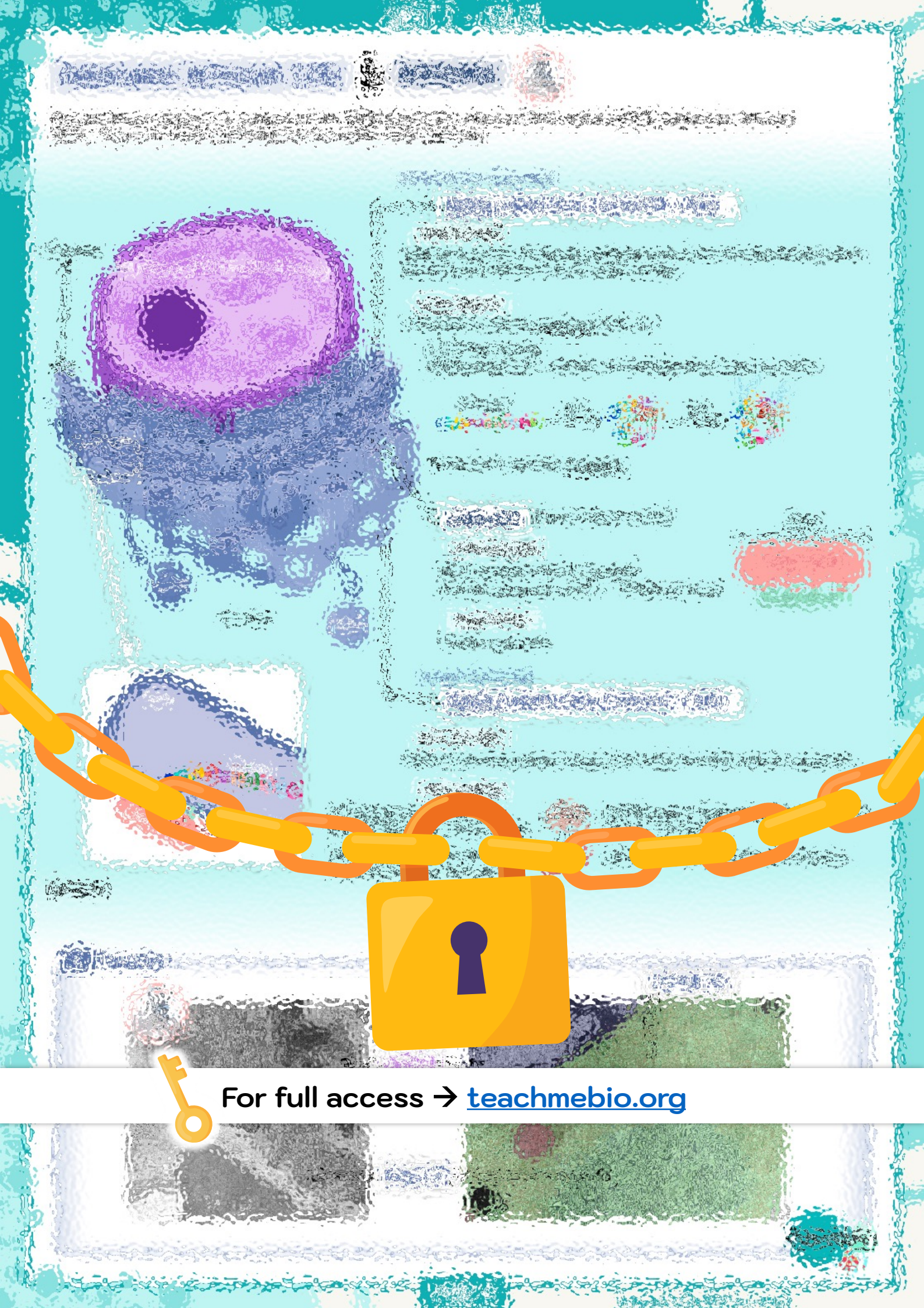
For full access → teachmebio.org



For full access → teachmebio.org



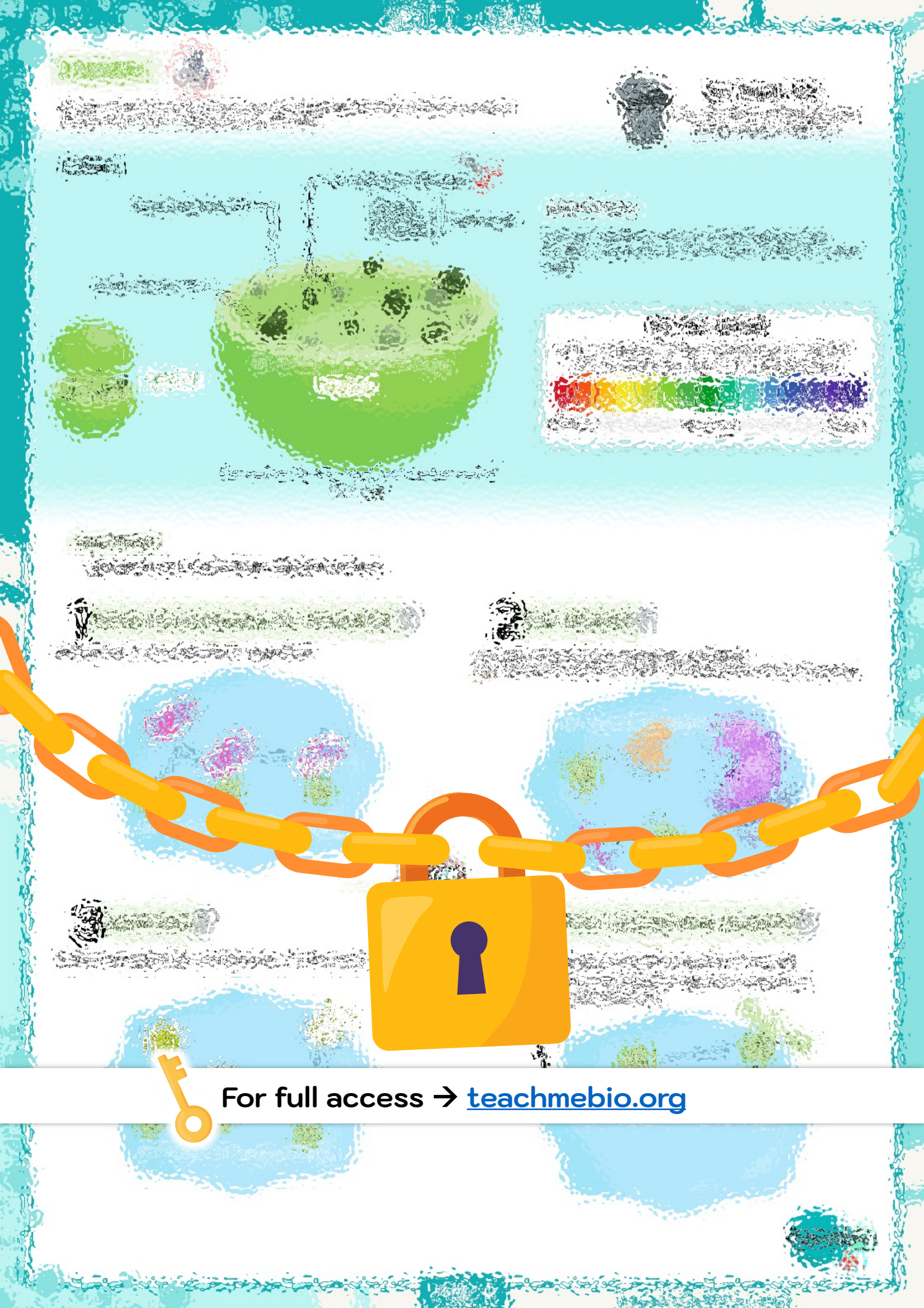
For full access → teachmebio.org



For full access → teachmebio.org



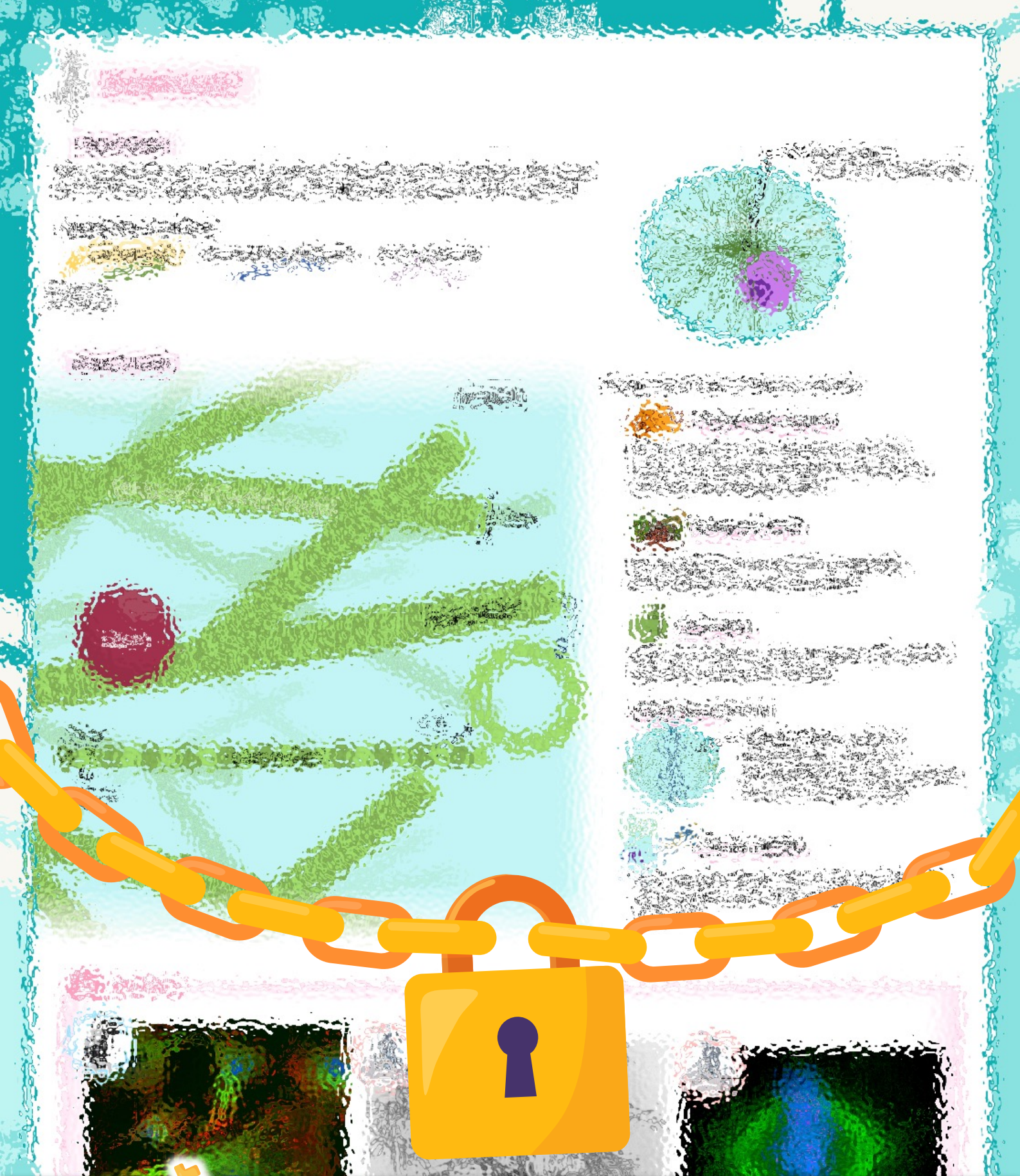
For full access → teachmebio.org



For full access → teachmebio.org



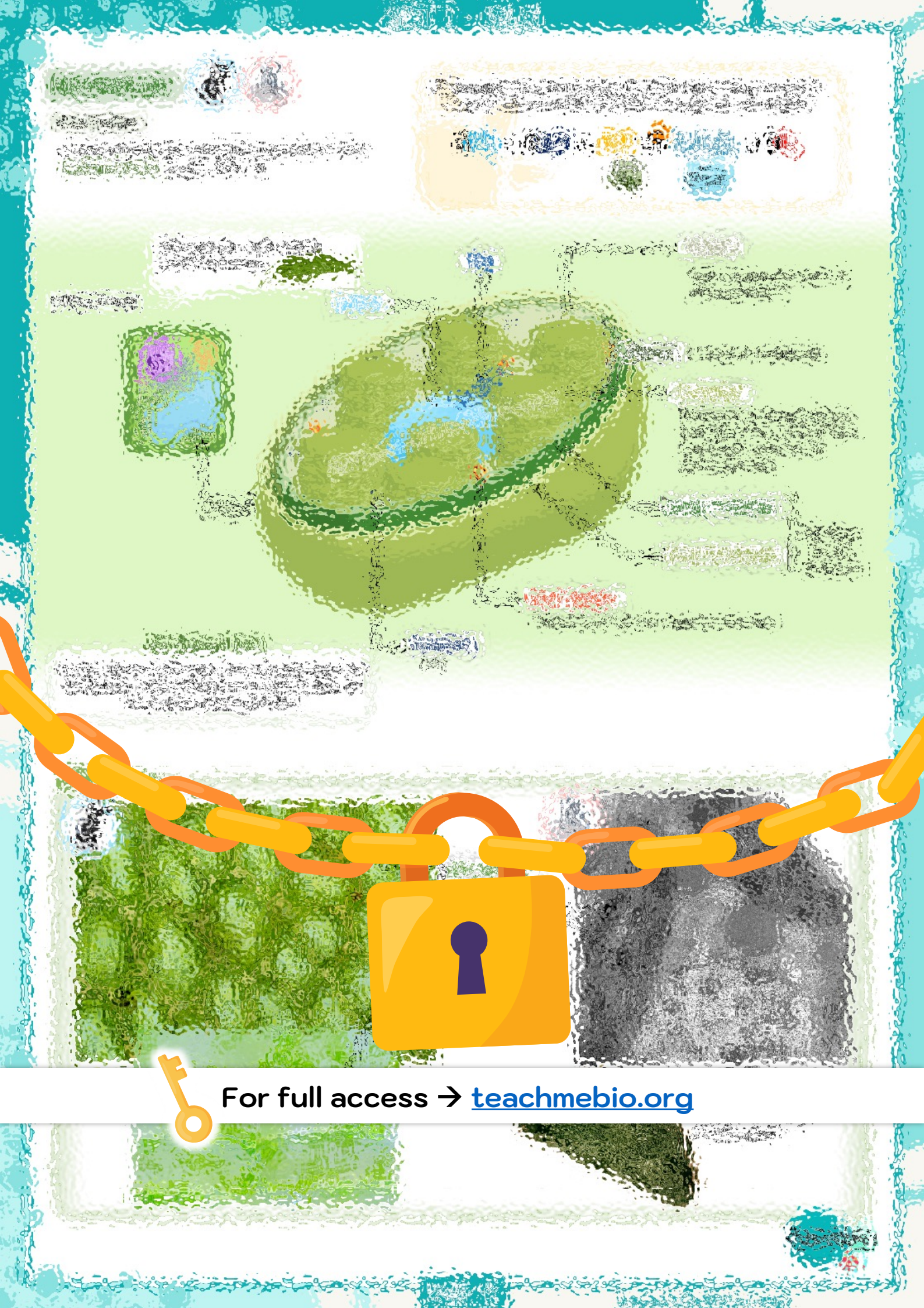
For full access → teachmebio.org



For full access → [teachmebio.org](https://www.teachmebio.org)



For full access → teachmebio.org



For full access → teachmebio.org



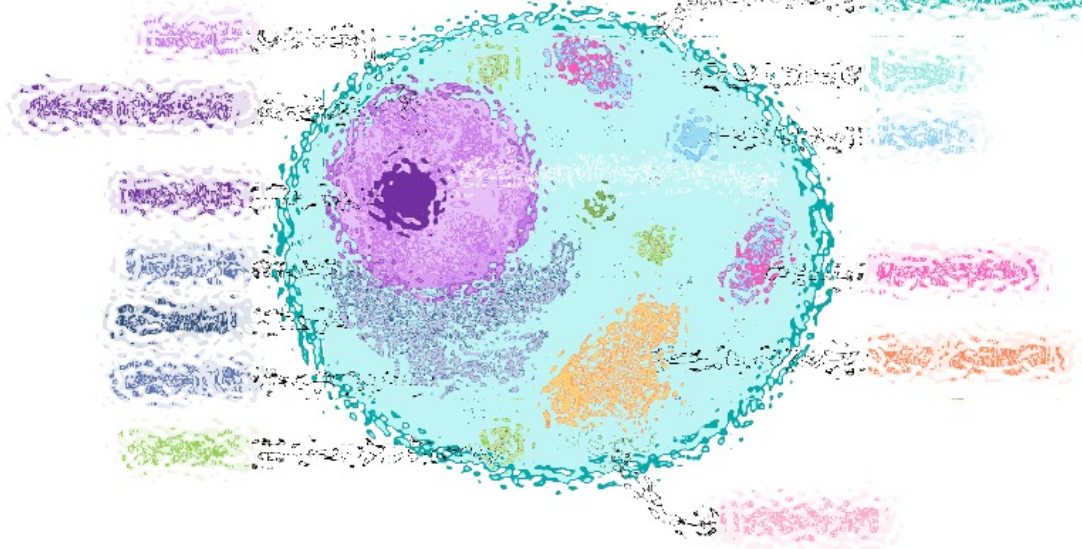
For full access → teachmebio.org



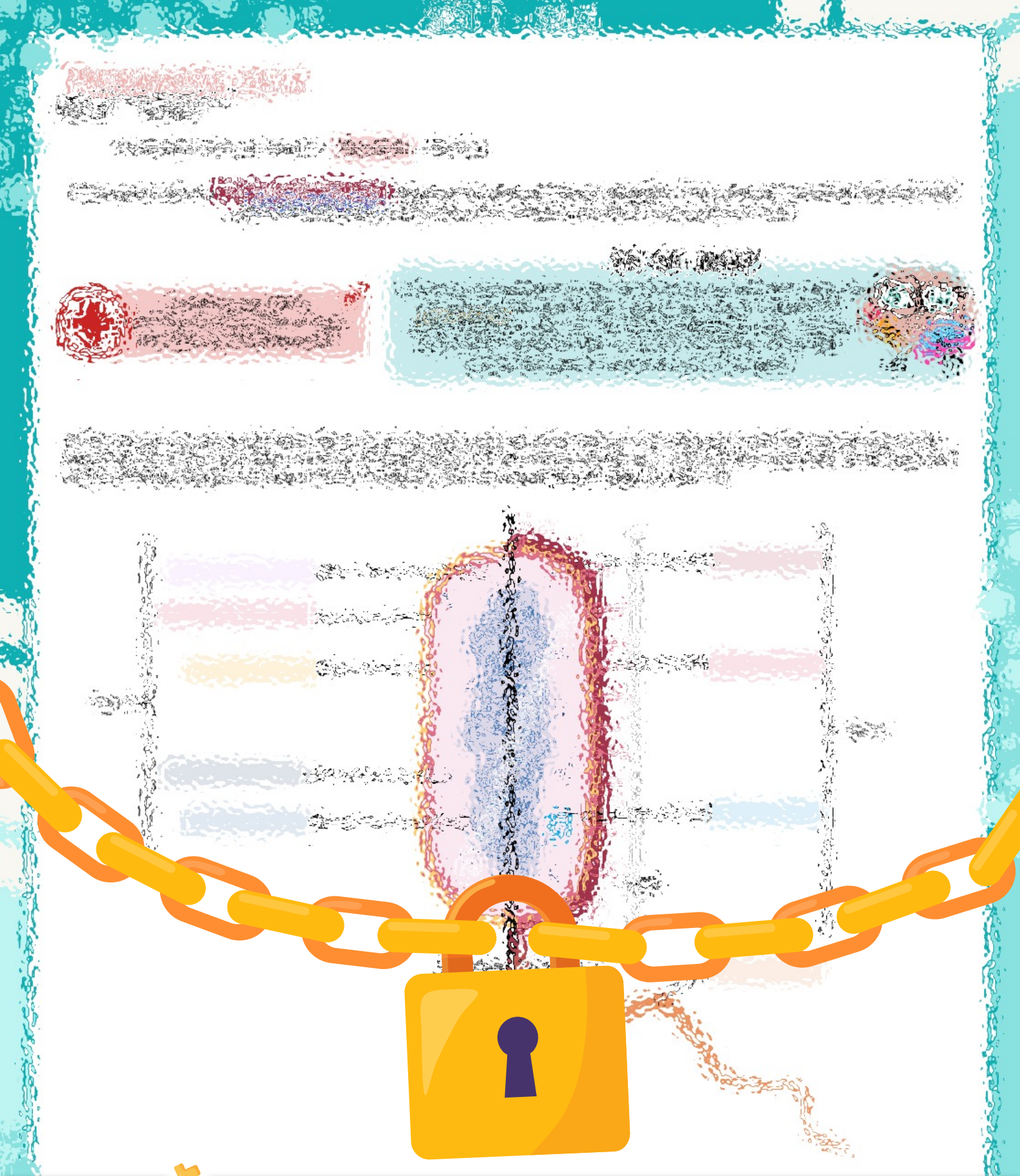
For full access → teachmebio.org



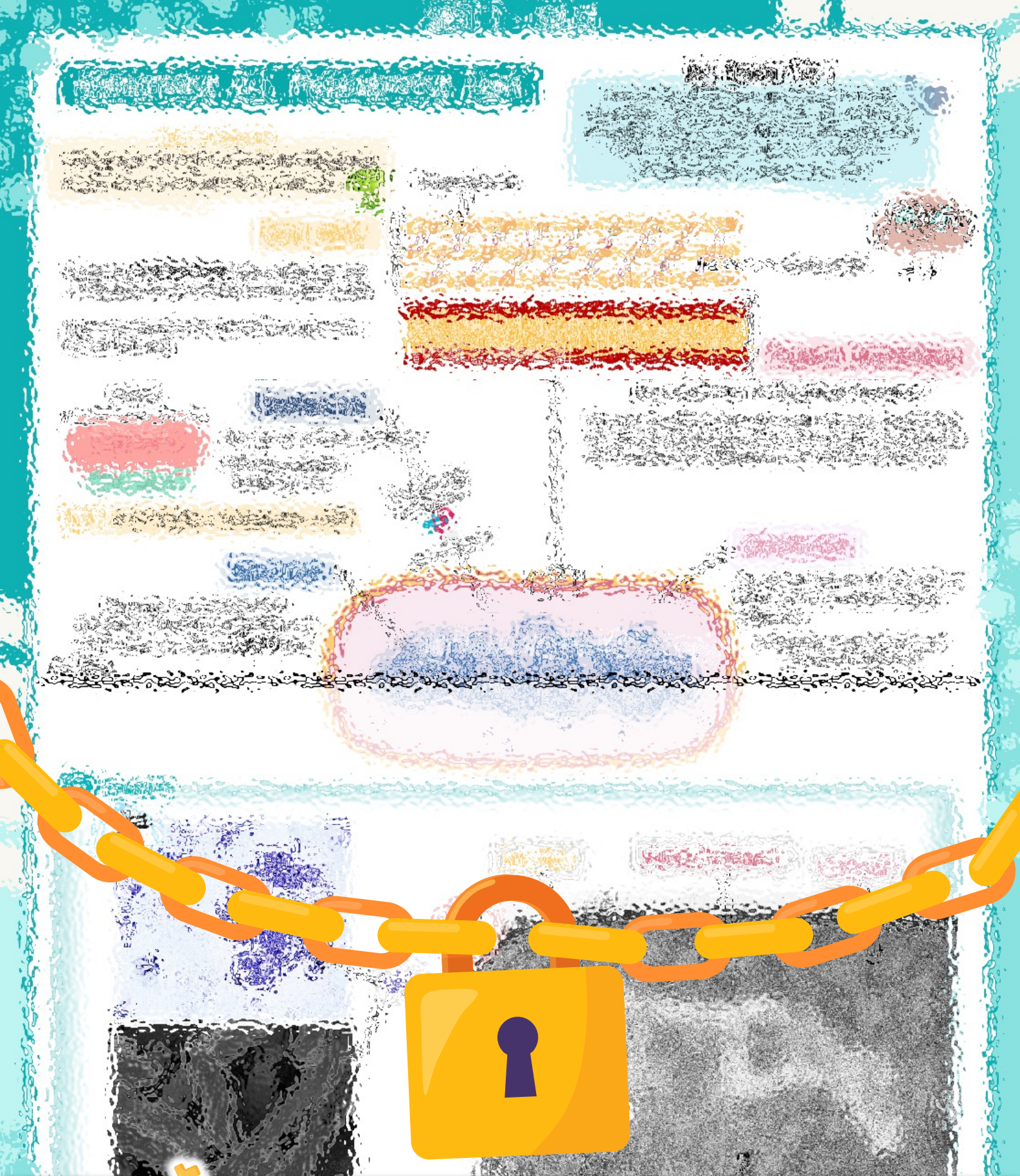
For full access → teachmebio.org



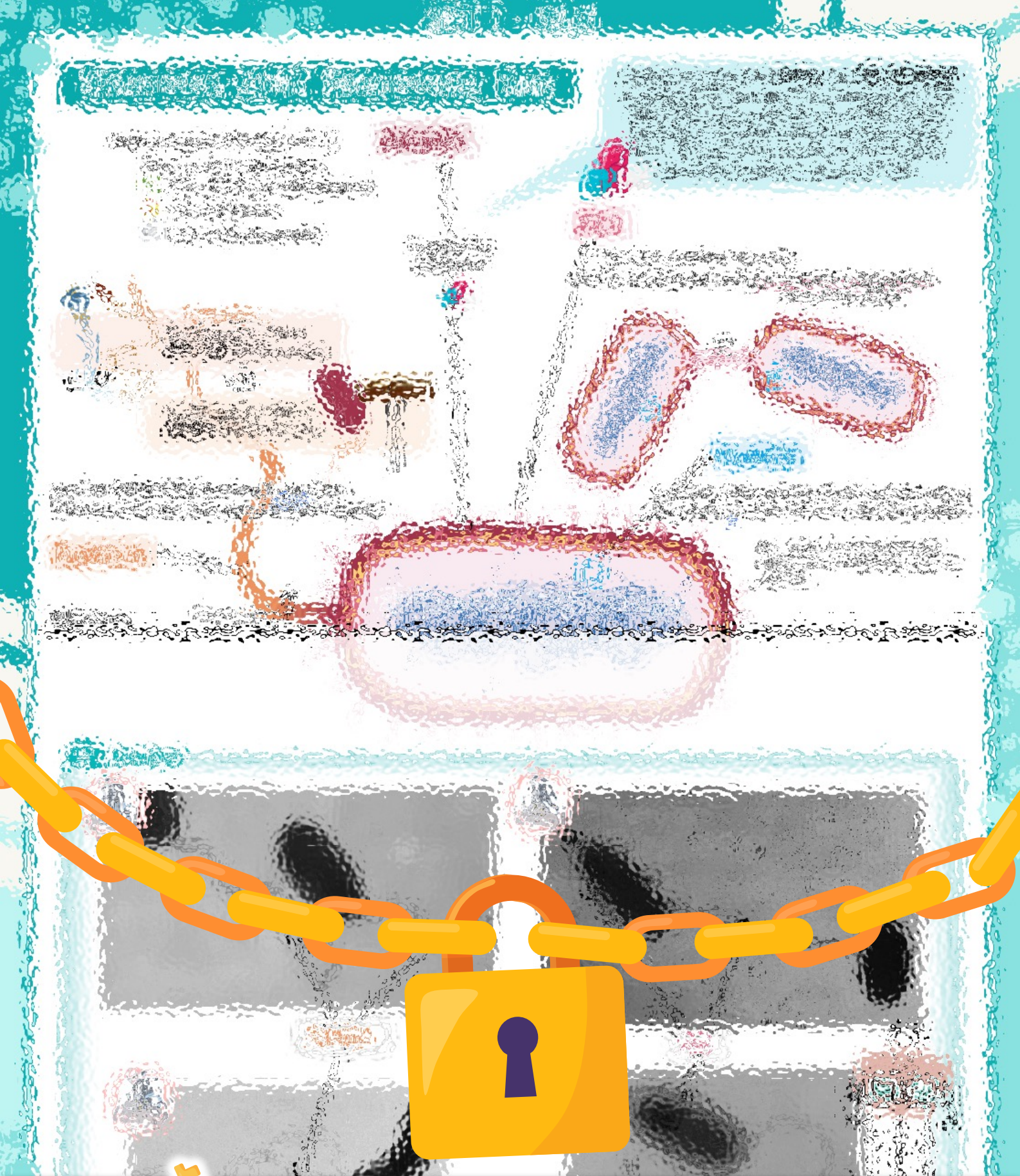
For full access → teachmebio.org



For full access → teachmebio.org



For full access → teachmebio.org



For full access → teachmebio.org



For full access → teachmebio.org

WIR



For full access → teachmebio.org