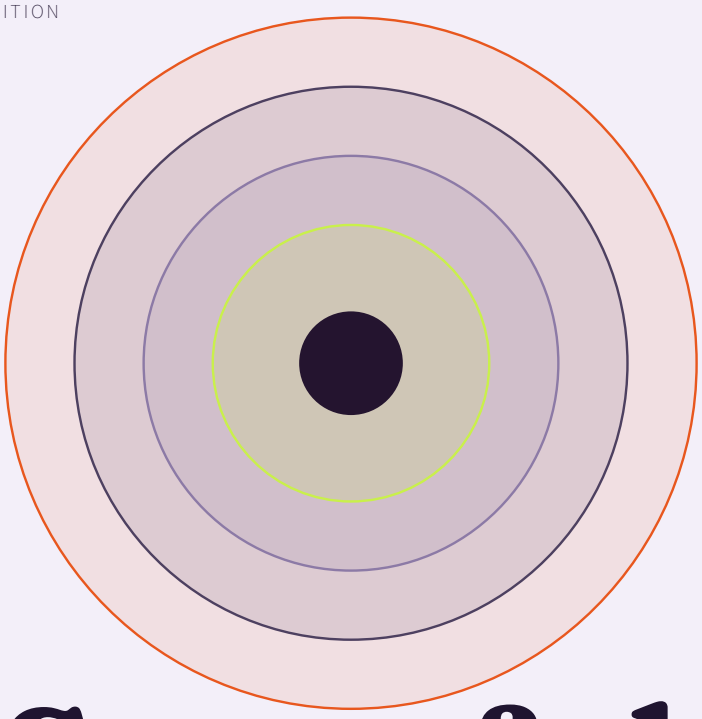


The Song of the Cell: An Exploration of Medicine and the New Human

A reading of the book by Siddhartha Mukherjee (2022)

1. ACTION BOOK

CONTENTS

Inside this edition

The book in a minute 4

The takeaways 5

Your action book 7

Before you go 8

PART TWO · THE ACTION BOOK

The setup checklist 10

Ask where a cell-therapy headline stands 11

Explain one cell a week 12

Write your questions before appointments 13

ABOUT THIS EDITION

This is HourLife's reading of The Song of the Cell: An Exploration of Medicine and the New Human, in our own words. It is not a substitute for the book.

BEFORE YOU START 01

The book in a minute

Siddhartha Mukherjee is a cancer physician and researcher at Columbia University and the author of The Emperor of All Maladies and The Gene. The Song of the Cell is a history of the cell, the smallest unit of life, and of the medicine built on it. It runs from the first microscopes of Robert Hooke and Antonie van Leeuwenhoek, through the cell theory of Schleiden, Schwann and Rudolf Virchow, to the cells of the blood, the immune system, the brain and the organs. Its central argument is that a body is a cooperating society of cells, and that medicine is moving from acting on cells to rebuilding them, through in vitro fertilisation, bone marrow transplants and engineered immune cells. Mukherjee mixes the history with patients' stories, among them Emily Whitehead, one of the first children treated with CAR-T cell therapy, and with the ethical questions that new cell therapies raise.

Below are the 9 ideas HourLife readers vote up most, each in our words with a note on what it asks of you, and then the steps that put them to work.

WHAT READERS KEEP

The takeaways

1 HOURLIFE TAKEAWAY

To understand an illness, find the cell that has gone wrong.

This is the shift the book is built on. For centuries doctors explained disease through humours or whole organs. Rudolf Virchow's cellular pathology in the 1850s moved the question down to the cell, and most of modern medicine still starts there.

2 HOURLIFE TAKEAWAY

Every cell comes from another cell, so life is one unbroken line of division.

Matthias Schleiden and Theodor Schwann argued in the late 1830s that plants and animals are made of cells, but Schwann thought new cells could form out of fluid. Virchow and others showed that cells only arise by dividing. The Latin phrase that sums it up, omnis cellula e cellula, became a founding rule of biology.

3 HOURLIFE TAKEAWAY

People saw cells long before anyone knew what they were.

In 1665 Robert Hooke looked at a slice of cork and named its little boxes cells. In the 1670s Antonie van Leeuwenhoek, a cloth merchant in Delft with hand-made lenses, saw living creatures in a drop of water. It took nearly two centuries to turn those sightings into a theory.

4 HOURLIFE TAKEAWAY

A body works because its cells specialise and cooperate, like citizens of one city.

Blood cells carry, guard and repair. Neurons signal. Cells in the pancreas keep sugar in balance. Each does one job for the good of the whole, and the book reads cancer as a citizen that stops cooperating and serves only itself.

5 HOURLIFE TAKEAWAY

Medicine is moving from drugs that act on cells to cells that act as drugs.

In 2012 Emily Whitehead, a young girl with leukaemia that had returned after treatment, became one of the first children given CAR-T therapy: her own T cells, engineered to find and attack her cancer. She went into remission and stayed there. Her case is one of the book's central stories.

6 HOURLIFE TAKEAWAY

An immune system has to tell self from other, and its mistakes run both ways.

Too little defence lets infection in; too much turns the body's guards against itself. The book follows neutrophils, T cells and the Covid pandemic. In severe Covid, much of the harm came from an immune response that would not stand down.

7 HOURLIFE TAKEAWAY

The brain thinks with separate cells joined in networks, not one continuous web.

Around 1890 Santiago Ramón y Cajal, using a stain developed by Camillo Golgi, argued that the nervous system is made of distinct cells that meet at gaps. Golgi disagreed, and the two shared the Nobel Prize in 1906. Cajal's view, the neuron doctrine, won out.

8 HOURLIFE TAKEAWAY

Every new power over cells needs trust, consent and open rules.

In vitro fertilisation was attacked as unnatural before Louise Brown's birth in 1978 and is now routine. In 2018 He Jiankui announced twin girls whose embryos he had gene-edited in secret, and was later jailed in China. The book sets the two side by side to ask how a new technology earns a society's trust.

9 HOURLIFE TAKEAWAY

The new human is already among us, one rebuilt cell at a time.

People alive after a bone marrow transplant, children born by IVF and patients living with engineered T cells are all bodies changed at the level of the cell. Mukherjee asks readers to welcome these advances while still questioning them, and reminds us how much of the cells' signalling we do not yet understand.

PUT IT TO WORK

Your action book

Do the setup steps once, then keep the habits going. The setup changes your week; the habits keep it changed after the first good one.

The download puts this whole reading and a printable action book in one PDF: the setup checklist, then a page of real calendar days for each habit, starting on the day you choose.

SET UP ONCE

- [ ] Find out your blood type
- [ ] Check whether you can donate blood or stem cells
- [ ] Look at cells with your own eyes
- [ ] Gather your vaccination record
- [ ] Bookmark one reliable health source

KEEP UP DAILY

- ◯ Ask where a cell-therapy headline stands
- ◯ Explain one cell a week
- ◯ Write your questions before appointments

30 days · Nov 6 - Dec 5, 2026

Part two, after the reading, prints each of these as a page to fill in by hand.

THE LAST WORD

Before you go

Pick one step from the action book and do it today. An idea from a book starts to count once it changes what one ordinary day looks like.

PART TWO

The action book

Change the setup once, then keep it up. 5 setup actions to do once, and 3 habits to mark each day for 30 days.

Nov 6 - Dec 5, 2026

Print it, or write on it in any PDF app.

SET UP ONCE

The setup checklist

Each of these is done once. Do one a day, and check it off when it is done.

☐ SETUP 1

Find out your blood type

Check your records, or ask for it at your next blood test or donation.

Write it down somewhere you can find it.

MY VERSION

DONE ON

☐ SETUP 2

Check whether you can donate blood or stem cells

Look up your national blood service and your country's stem cell or bone marrow donor register.

Read their eligibility rules and, if you qualify, book one appointment.

MY VERSION

DONE ON

☐ SETUP 3

Look at cells with your own eyes

Borrow a microscope or buy a cheap clip-on lens for your phone.

Peel the thin skin from inside an onion layer and look for the boxes Hooke saw in cork.

MY VERSION

DONE ON

☐ SETUP 4

Gather your vaccination record

Find your vaccination history in your health records or app, and save a copy.

Ask your clinician at your next visit whether anything is due.

MY VERSION

DONE ON

☐ SETUP 5

Bookmark one reliable health source

Save the site of your national health service or national institutes of health.

Go there first when you read about a new cell therapy.

MY VERSION

DONE ON

DAILY HABIT 1 OF 3

Ask where a cell-therapy headline stands

When you read about a breakthrough, check whether it is lab work, an animal study, an early human trial or an approved treatment.

Nov 6 - Dec 5, 2026 · 30 days · circle each day you do it

SMALLEST VERSION

CUE

WHERE

November 2026

MON	TUE	WED	THU	FRI	SAT	SUN
						1
2	3	4	5	6 ○	7 ○	8 ○
9 ○	10 ○	11 ○	12 ○	13 ○	14 ○	15 ○
16 ○	17 ○	18 ○	19 ○	20 ○	21 ○	22 ○
23 ○	24 ○	25 ○	26 ○	27 ○	28 ○	29 ○
30 ○						

December 2026

MON	TUE	WED	THU	FRI	SAT	SUN
	1 ○	2 ○	3 ○	4 ○	5 ○	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

EACH FRIDAY

WHAT HELPED

WHAT GOT IN THE WAY

ONE CHANGE TO THE SETUP

DAILY HABIT 2 OF 3

Explain one cell a week

Pick one cell from the explorer on this page and explain its job to someone in two minutes.

Nov 6 - Dec 5, 2026 · 30 days · circle each day you do it

SMALLEST VERSION

CUE

WHERE

November 2026

MON	TUE	WED	THU	FRI	SAT	SUN
						1
2	3	4	5	6 ○	7 ○	8 ○
9 ○	10 ○	11 ○	12 ○	13 ○	14 ○	15 ○
16 ○	17 ○	18 ○	19 ○	20 ○	21 ○	22 ○
23 ○	24 ○	25 ○	26 ○	27 ○	28 ○	29 ○
30 ○						

December 2026

MON	TUE	WED	THU	FRI	SAT	SUN
	1 ○	2 ○	3 ○	4 ○	5 ○	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

EACH FRIDAY

WHAT HELPED

WHAT GOT IN THE WAY

ONE CHANGE TO THE SETUP

DAILY HABIT 3 OF 3

Write your questions before appointments

Before you see a clinician, write down your three most important questions and take the list with you.

Nov 6 - Dec 5, 2026 · 30 days · circle each day you do it

SMALLEST VERSION

CUE

WHERE

November 2026

MON	TUE	WED	THU	FRI	SAT	SUN
						1
2	3	4	5	6 ○	7 ○	8 ○
9 ○	10 ○	11 ○	12 ○	13 ○	14 ○	15 ○
16 ○	17 ○	18 ○	19 ○	20 ○	21 ○	22 ○
23 ○	24 ○	25 ○	26 ○	27 ○	28 ○	29 ○
30 ○						

December 2026

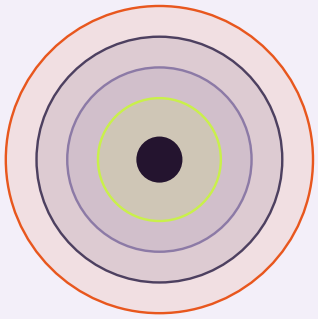
MON	TUE	WED	THU	FRI	SAT	SUN
	1 ○	2 ○	3 ○	4 ○	5 ○	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

EACH FRIDAY

WHAT HELPED

WHAT GOT IN THE WAY

ONE CHANGE TO THE SETUP



A body is a society of cells that keep faith with one another, and medicine is learning to make new citizens.

HOURLIFE NOTE AFTER SIDDHARTHA MUKHERJEE