THE NOBEL PRIZE

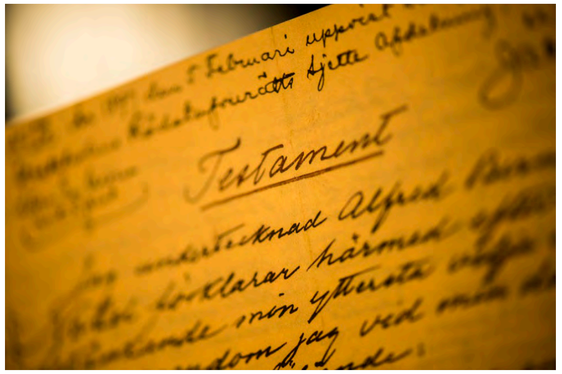
ALL NOBEL PRIZES 2025

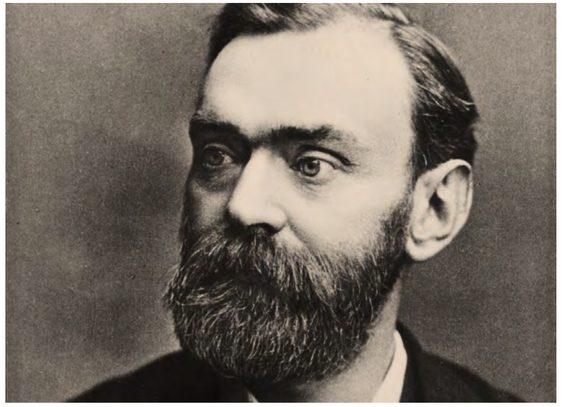
Nobel Prize lessons

The Nobel Prize

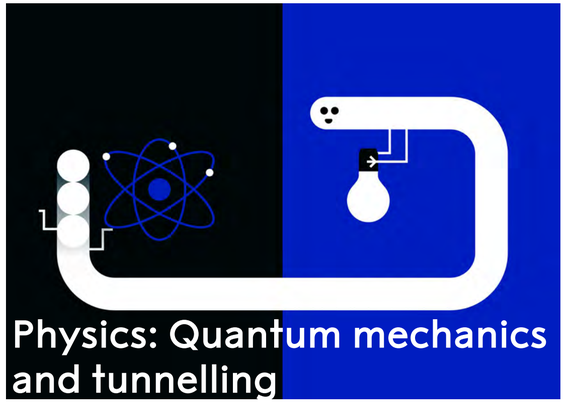
"to those who, during the preceding year, shall have conferred the greatest benefit to humankind"

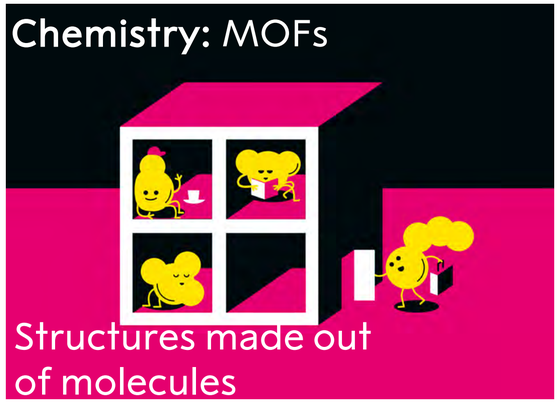
Alfred Nobel
(1833–1896)

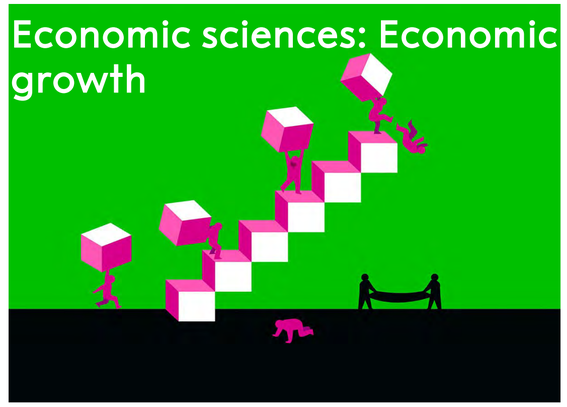




What are the 2025 Nobel Prizes about?

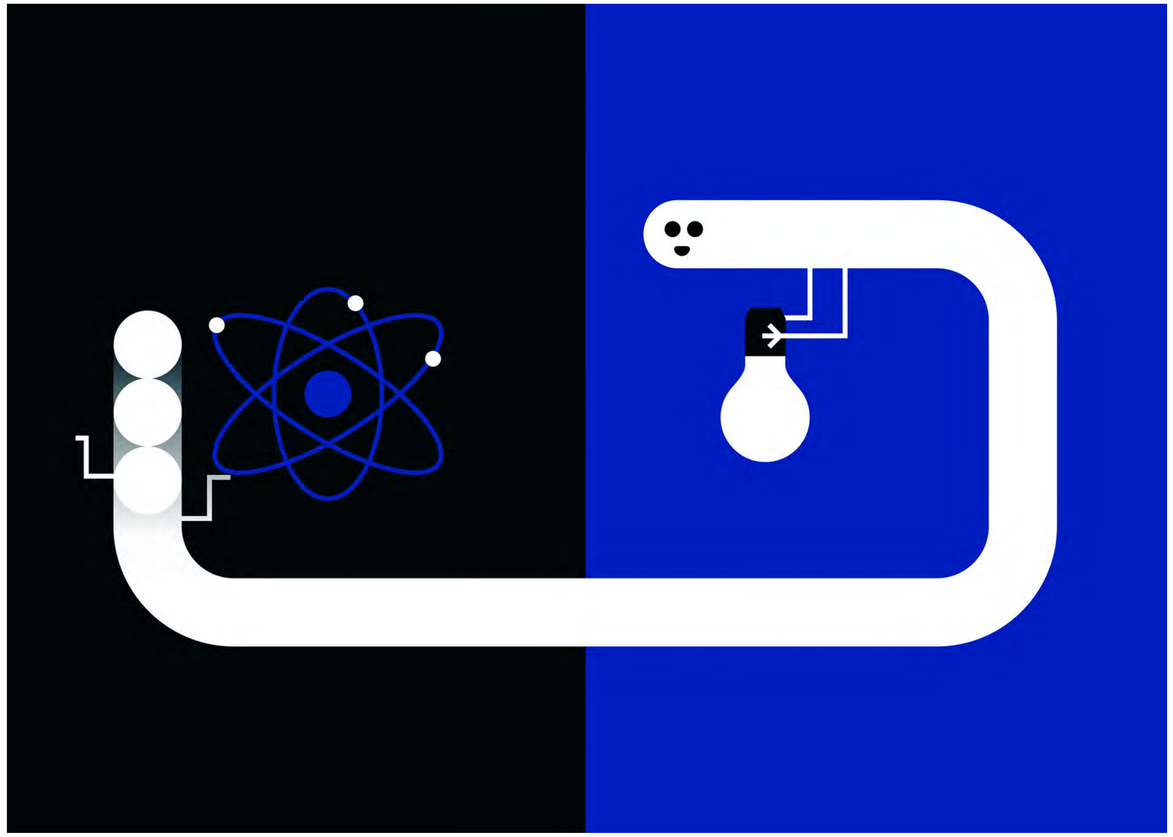


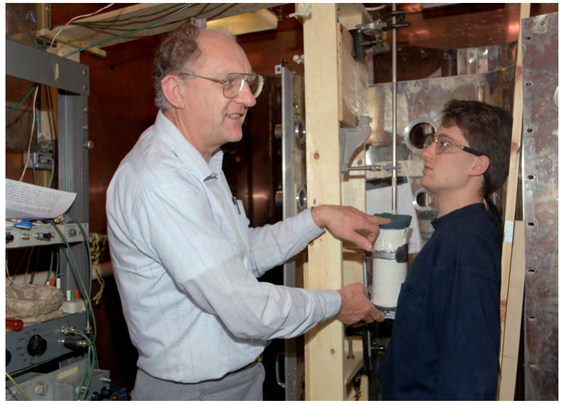




The 2025 physics prize – Quantum mechanics and tunnelling

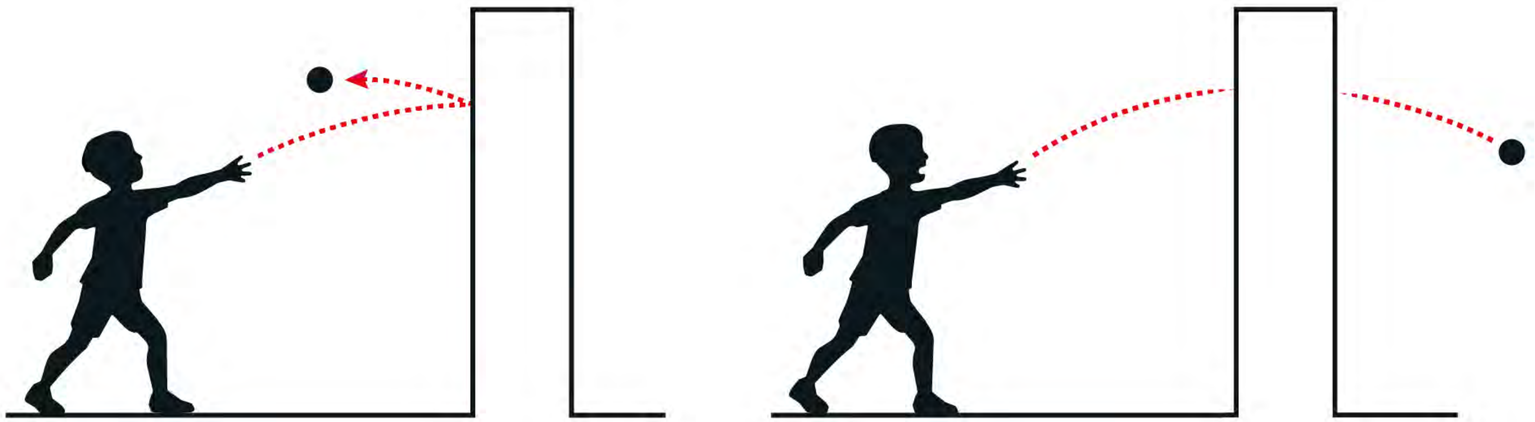
The 2025 physics prize is about quantum mechanics and tunnelling.





Tunnelling

Tunnelling occurs when something goes through barriers that should actually be impossible to traverse.



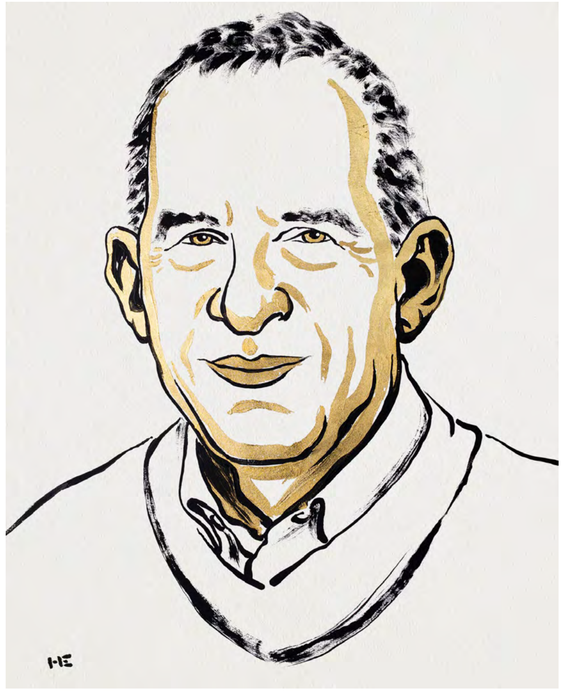
The 2025 Nobel Prize laureates in physics

“for the discovery of macroscopic quantum mechanical tunnelling and energy quantisation in an electric circuit”

“None of this work would have happened without the two of them“

John Clarke

John Clarke
Born: 1942, United Kingdom



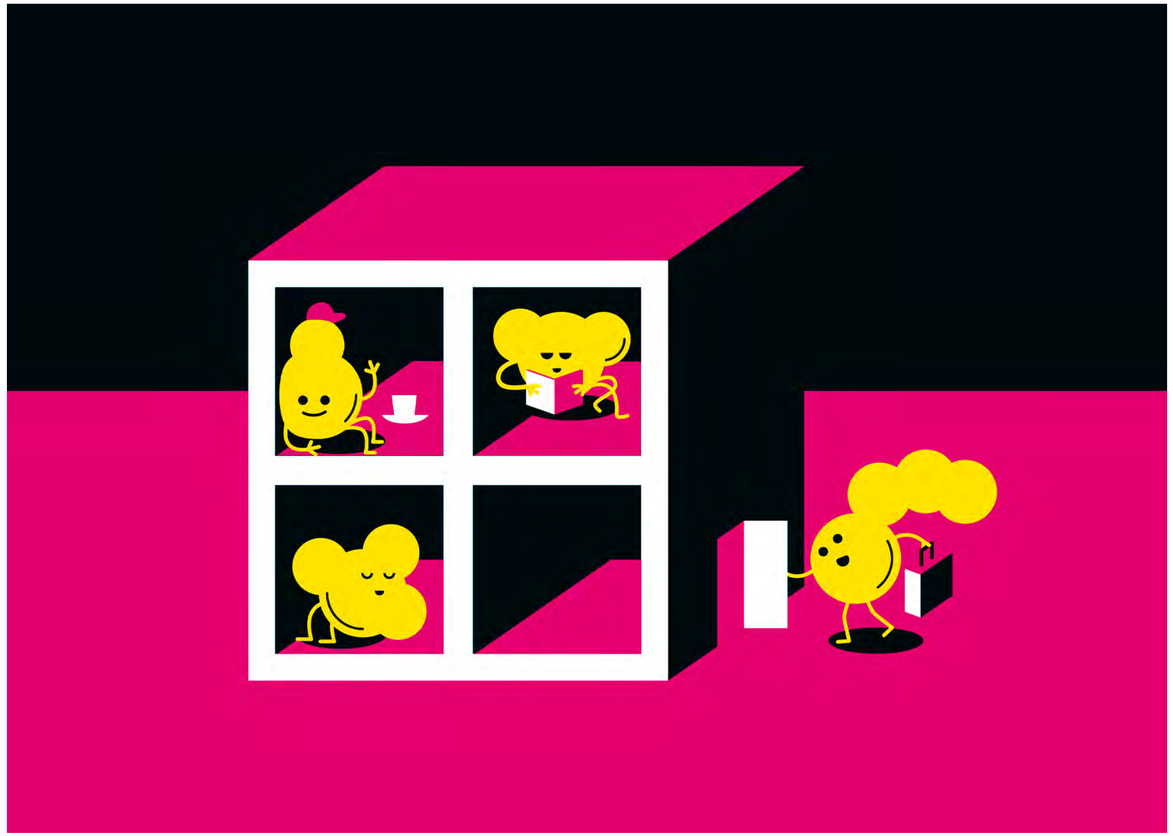
Michel Devoret
Born: 1953, France

John Martinis
Born: 1958

The 2025 chemistry prize
MOFs – Structures made out of molecules

The chemistry laureates have created structures made out of molecules that are called MOFs.

Molecules are able to move in and out of these structures.



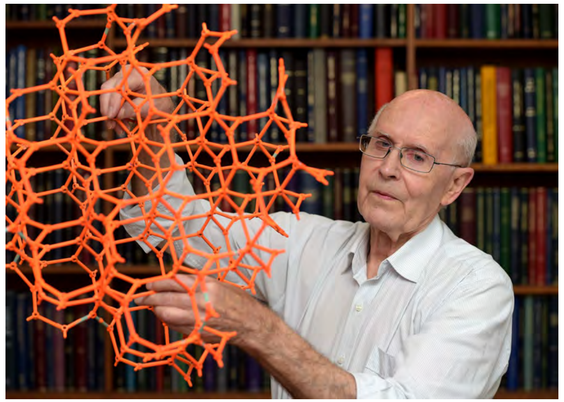


PHOTO: UNIVERSITY OF MELBOURNE

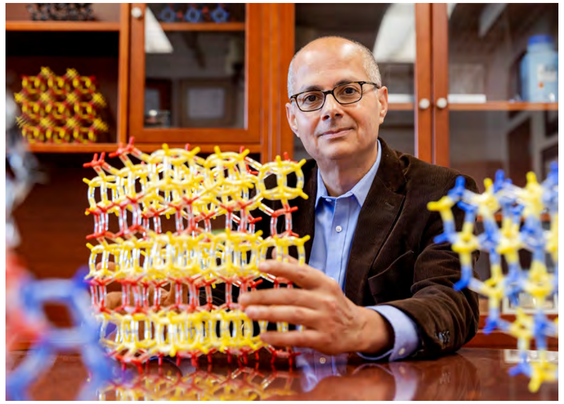


PHOTO BRITTANY HOSEA-SMALL, UC BERKELEY

A football field in a sugar cube

A small piece of a MOF called MOF–5 is no larger than a sugar cube but has an inner surface as big as a football pitch.

PHOTO: SHUTTERSTOCK

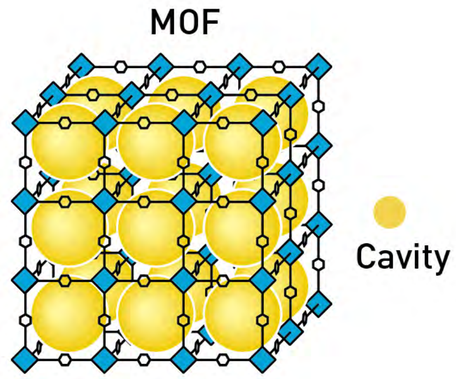


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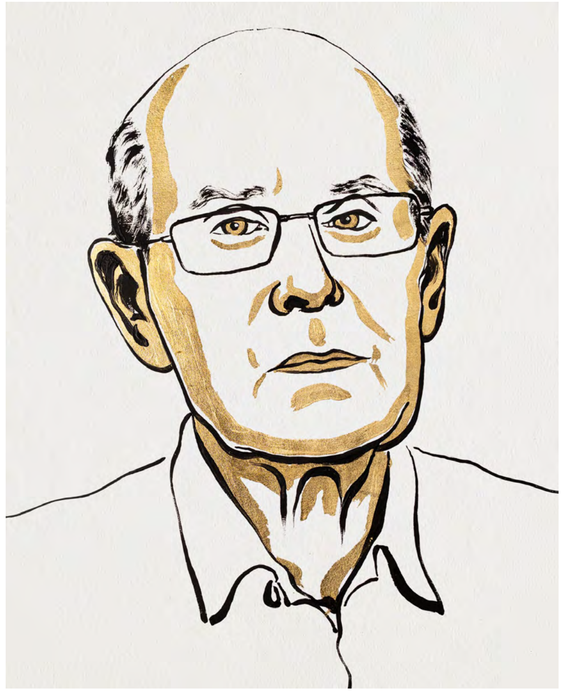
PHOTO: SHUTTERSTOCK

The 2025 Nobel Prize laureates in chemistry

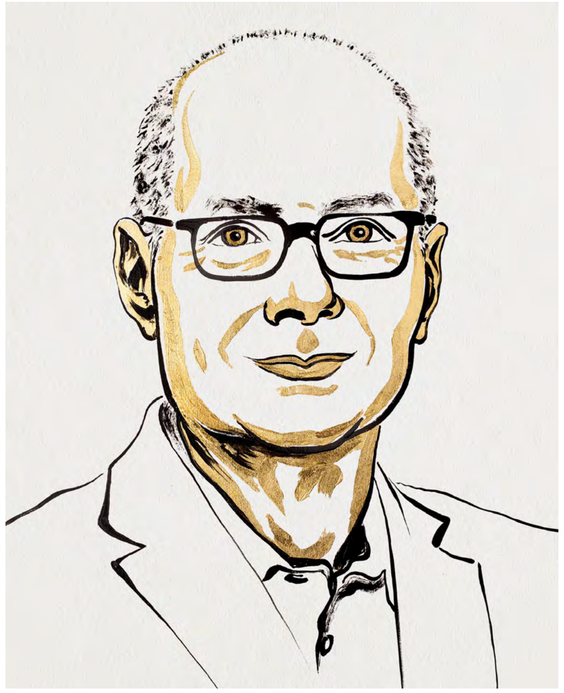
”för utveckling av metallorganiska ramverk”

Susumu Kitagawa has a dream that we will soon be able to capture pollutants from the air by using MOFs!

Susumu Kitagawa
Born: 1951, Japan



Richard Robson
Born: 1937, United Kingdom



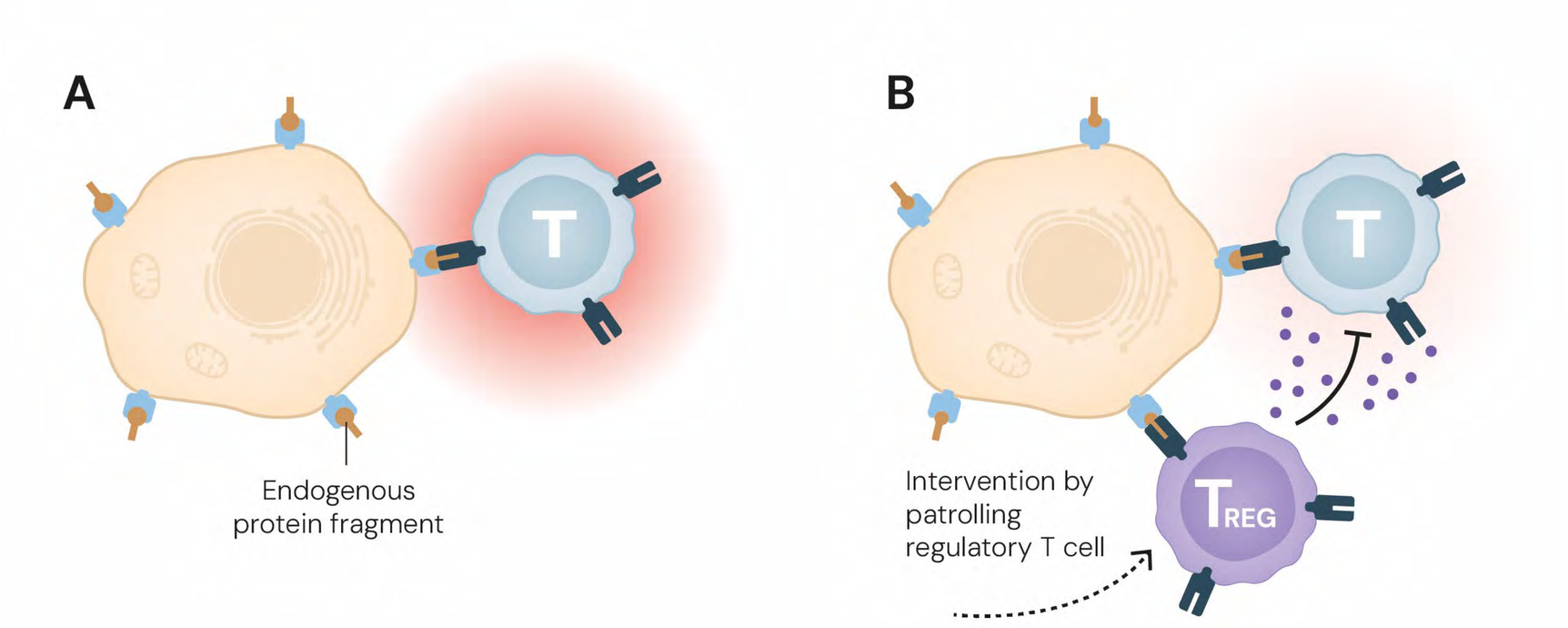
Omar Yaghi
Born: 1965, Jordan

The 2025 medicine prize – The immune system's security guards

The 2025 medicine prize recognises discoveries about our immune system.

The laureates discovered a previously unknown immune cell called regulatory T cell (TREG). It acts as a kind of security guard in the immune system.

Regulatory T cells



A
An immune cell (blue) has mistakenly attacked one of the body's own cells. It alerts other immune cells that the body is under attack so that they can come and destroy the healthy cell. This may lead to autoimmune diseases.

B
A regulatory T cell detects the attack and intervenes. The alarm is toned down, which prevents autoimmune diseases.

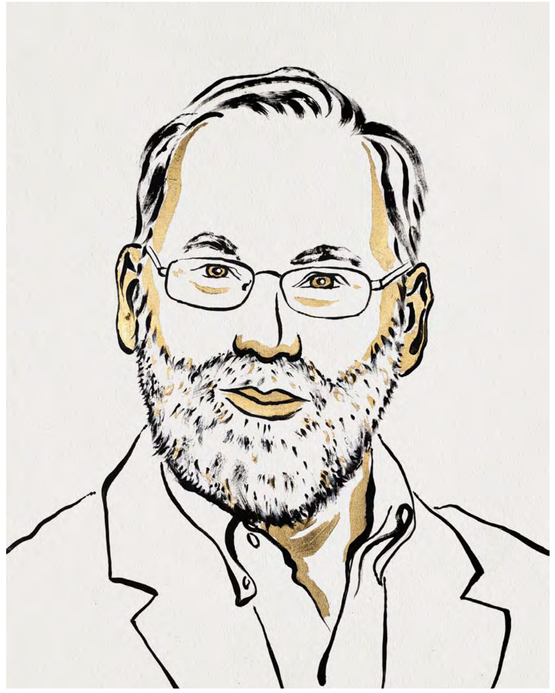
The 2025 Nobel Prize laureates in physiology or medicine

“for their discoveries concerning peripheral immune tolerance”

“It takes a bunch of different brains, all working on it together, for sure!”

Mary E. Brunkow

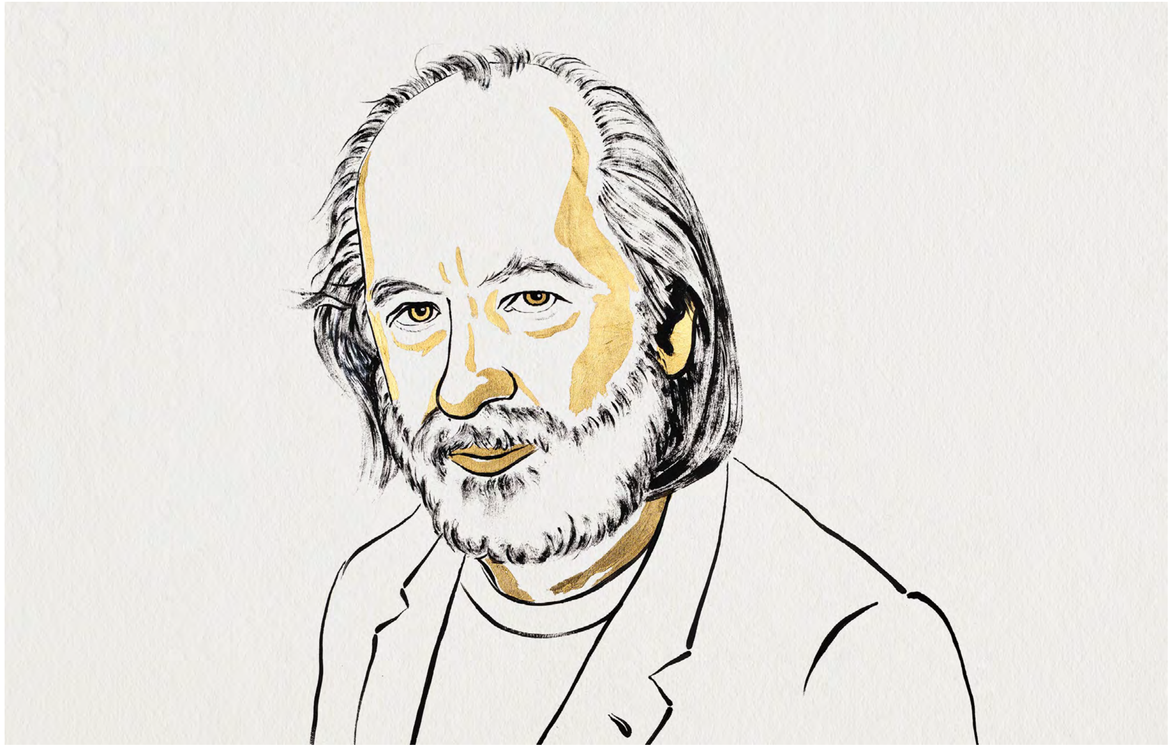
Mary E. Brunkow
Born: 1961, USA



Frederick J. Ramsdell
Born: 1960, USA

Shimon Sakaguchi
Born: 1951, Japan

The 2025 Nobel Prize laureate in literature



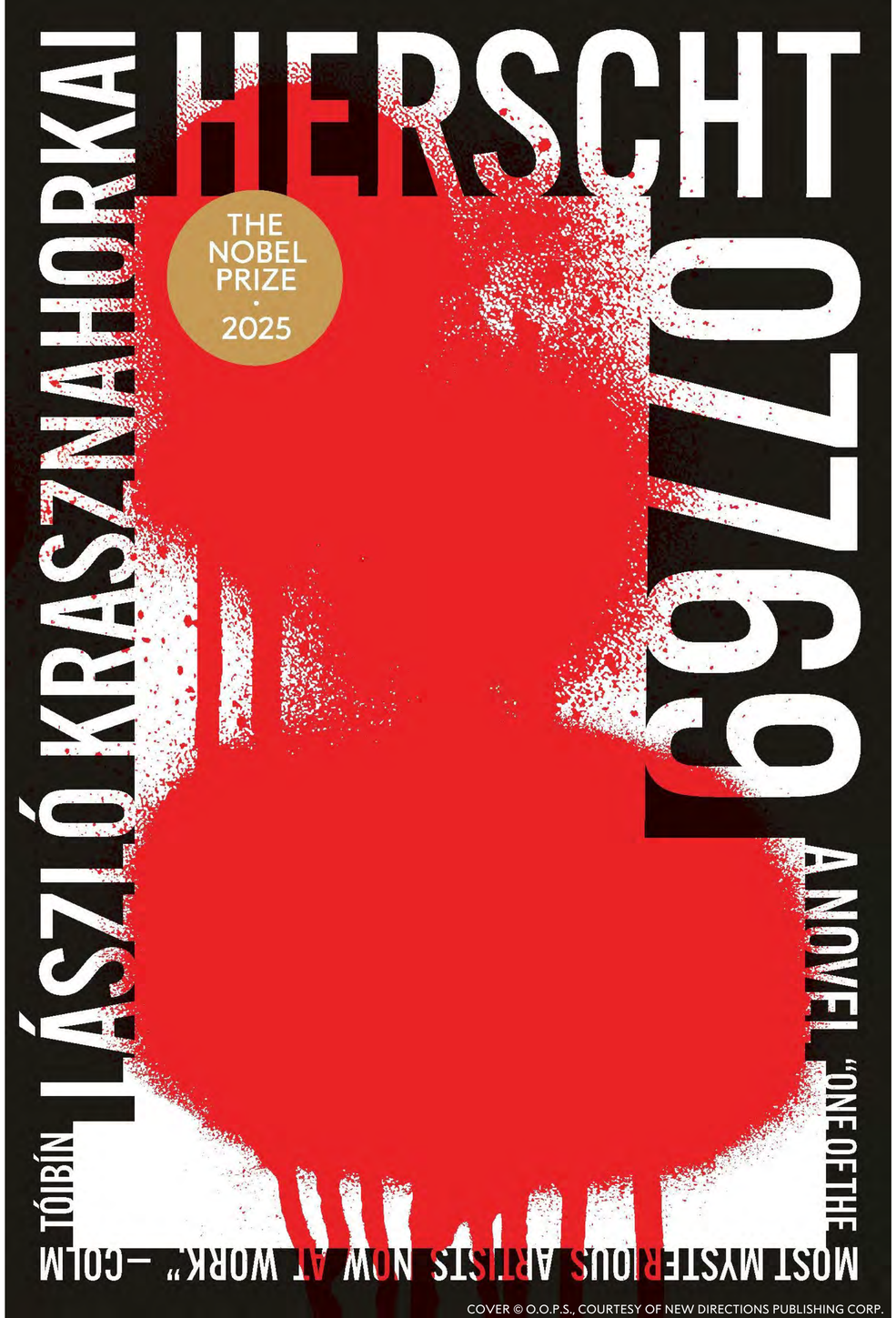
ILL. NIKLAS ELMEHED © NOBEL PRIZE OUTREACH

Name: László Krasznahorkai
Born: 1954, Hungary

"for his compelling and visionary oeuvre that, in the midst of apocalyptic terror, reaffirms the power of art"

About Krasznahorkai’s writings

Something that sets Krasznahorkai apart is that he uses long, winding sentences in his writing. Sometimes, he writes several pages without a single stop. In fact, one of his books, which is 300 pages long, only has a single full stop.



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A short excerpt from *Herscht 07769*

"... he signed the letter, folded it twice, slipped it into the envelope, and addressed it, but no, he shook his head, it wasn't good, he took the letter out of the envelope, crumpled it up and threw the paper to the ground ..."

The 2025 Nobel Peace Prize laureate – Maria Corina Machado

ILL. NIKLAS ELMEHED © NOBEL PRIZE OUTREACH

Name: Maria Corina Machado
Born: 1967, Venezuela

"for her tireless work promoting democratic rights for the people of Venezuela and for her struggle to achieve a just and peaceful transition from dictatorship to democracy"

The struggle for democracy in Venezuela

Nicolás Maduro has been the president of Venezuela since 2013. In the 2024 election, he declared himself the winner, despite the fact that there was evidence that the opposition won.

IMAGES: SHUTTERSTOCK

Democracy and peace go hand in hand

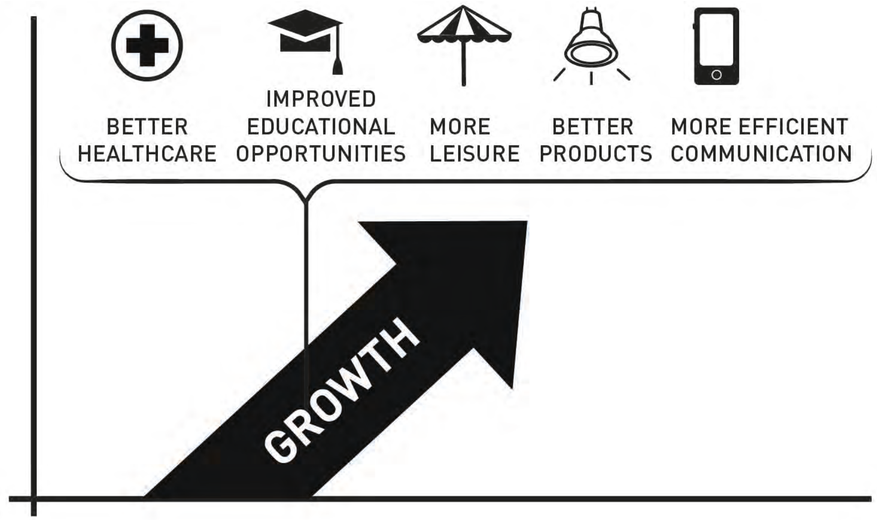
Maria Corina Machado has fought for democratic rights in Venezuela for many years.

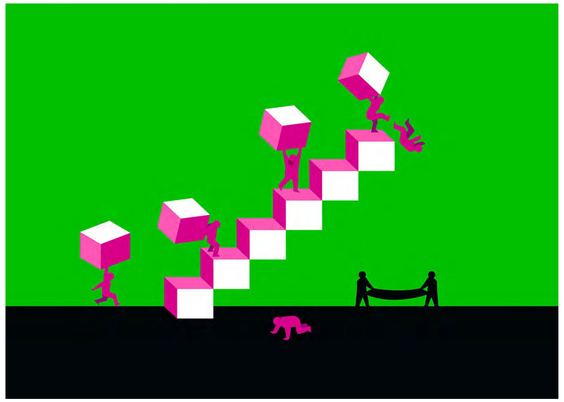
Today, she lives in hiding in order to not get arrested and imprisoned.

PHOTOS: CARLOS DÍAZ, CC BY 2.0 , VIA WIKIMEDIA COMMONS

How come so many people have become better off in the last 200 years?

Economic growth means that a country gets richer and that people become better off due to, for example, better healthcare, more leisure and new products and inventions.





The Industrial Revolution

The early 1800s saw the development of factories, machines and new technology. This is what's called the Industrial Revolution.

IMAGES:SHUTTERSTOCK

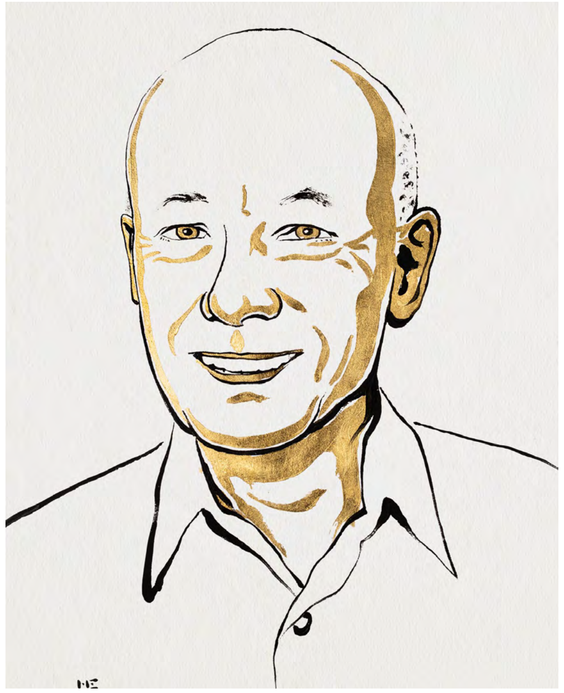
The 2025 economic sciences laureates

“for having identified the prerequisites for sustained growth through technological progress”

The 2025 economic sciences laureates have shown that knowledge and new technologies have improved the conditions in industrialised countries.

Joel Mokyr
Born: 1946, the Netherlands

Philippe Aghion
Born: 1956, France



Peter Howitt
Born: 1946, Canada

The Nobel Prize award ceremony

The Nobel Prizes are awarded every year on 10 December.

PHOTO: PI FRISK

THE
NOBEL
PRIZE

FOR THE GREATEST BENEFIT TO HUMANKIND

Nobel Prize lessons