

# Nobel Creations



## Artistic interpretations of the Nobel Prizes 2019

By:



# Nobel Creations PHYSICS

The 2019 Nobel Prize in Physics was awarded to:

JAMES PEEBLES

*“for theoretical discoveries in physical cosmology”*

MICHEL MAYOR AND DIDIER QUELOZ

*“for the discovery of an exoplanet orbiting a solar-type star”*

The 2019 Physics Prize rewards new understanding of the universe’s structure and history, and the first discovery of a planet orbiting a solar-type star outside our solar system. This year’s Laureates have contributed to answering fundamental questions about our existence. What happened in the early infancy of the universe and what happened next? Could there be other planets out there, orbiting other suns?



# Nobel Creations

# CHEMISTRY

The 2019 Nobel Prize in Chemistry was awarded to:

JOHN B. GOODENOUGH  
M. STANLEY WHITTINGHAM  
AKIRA YOSHINO

*“for the development of lithium-ion batteries”*

The 2019 Chemistry Prize rewards the development of the lithium-ion battery: a technological revolution. This lightweight, rechargeable and powerful battery is now used in everything from mobile phones to laptops and electric vehicles. It can also store significant amounts of energy from solar and wind power, making possible a fossil fuel-free society. To achieve this, the Laureates needed to overcome difficult challenges – especially in taming the highly reactive lithium atom.



Nobel Creations  
**PHYSIOLOGY  
OR MEDICINE**

The 2019 Nobel Prize in Physiology or Medicine was awarded to:

WILLIAM G. KAELIN JR  
SIR PETER J. RATCLIFFE  
GREGG L. SEMENZA

*“for their discoveries of how cells sense and adapt to oxygen availability”*

The 2019 Medicine Prize is about what happens in cells if they receive too much or too little oxygen. When the amount of oxygen increases or decreases inside a cell, it must adapt itself. The Laureates have found out what reactions then occur in the cell, what substances are active and how they affect each other. These discoveries have given us new knowledge about human physiology – that is, how our organs and tissues function, as well as our knowledge about diseases, for example anaemia and cancer.



# Nobel Creations LITERATURE

The Nobel Prize in Literature 2018 was awarded to:

OLGA TOKARCZUK

*“for a narrative imagination that with encyclopedic passion represents the crossing of boundaries as a form of life”*

Olga Tokarczuk, writer of novels, short stories and poetry, is one of Poland's best-known and most highly acclaimed writers. She is inspired by maps and by viewing the world from above. Her main focus is on Polish landscapes and stories but the themes in her works concern all of us. *The Books of Jacob* (2014), considered Tokarczuk's masterpiece, is a documentary novel about the remarkable and mystic sect leader Jacob Frank, who lived in the 18th century. It gives us a rich panorama of an almost neglected chapter in European history.

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# Nobel Creations LITERATURE

The Nobel Prize in Literature 2019 was awarded to:

PETER HANDKE

*“for an influential work that with linguistic ingenuity has explored the periphery and the specificity of human experience”*

Peter Handke, an author for more than 50 years, has come to be regarded as one of the most influential writers in Europe after the Second World War. He has written novels, essays, notebooks, dramatic works and screenplays. Handke explores the memory of the dead and his own origins in several works. In his book *A Sorrow Beyond Dreams: A Life Story* (1972), he briefly but affectionately writes about his mother after her suicide. At the same time, his work is full of the spirit of discovery – of viewing the world in new ways.



# Nobel Creations

# PEACE

The 2019 Nobel Peace Prize was awarded to:

ABIY AHMED ALI

*“for his efforts to achieve peace and international cooperation, and in particular for his decisive initiative to resolve the border conflict with neighbouring Eritrea”*

Between 1998–2000 an armed conflict between Ethiopia and Eritrea took place. Among the reasons behind the war was a dispute over how to draw the border between the two countries. When Abiy Ahmed became prime minister of Ethiopia he resumed peace talks with Eritrea, which led to a peace agreement. Abiy Ahmed has also engaged in other peace processes in East and Northeast Africa. In Ethiopia, he has initiated important reforms to strengthen the protection of human rights.



# Nobel Creations ECONOMIC SCIENCES

The Sveriges Riksbank Prize in Economic Sciences  
in Memory of Alfred Nobel 2019 was awarded to:

ABHIJIT BANERJEE  
ESTHER DUFLO  
MICHAEL KREMER

*“for their experimental approach to alleviating global poverty”*

The 2019 Prize in Economic Sciences is about combating poverty. The prize rewards research that helps us understand how we can effectively fight global poverty. The Laureates have devised new methods for finding out what forms of help work the best in improving students’ educational outcomes or child health, among other things. The results of their carefully designed field experiments have dramatically improved our ability to fight poverty in practice.