## Perspectiva

## Homenaje a los ganadores del Premio Nobel 2017

The 2017 Nobel Prize in Physiology or Medicine has been awarded jointly to Jeffrey C. Hall, Michael Rosbash and Michael W. Young for their discoveries of molecular mechanisms controlling the circadian rhythm. Life on Earth is adapted to the rotation of our planet. For many years we have known that living organisms, including humans, have an internal, biological clock that helps them anticipate and adapt to the regular rhythm of the day. But how does this clock actually work? Jeffrey C. Hall, Michael Rosbash and Michael W. Young were able to peek inside our biological clock and elucidate its inner workings. Their discoveries explain how plants, animals and humans adapt their biological rhythm so that it is synchronized with the Earth's revolutions.

The Nobel Prize in Physics 2017 was divided; one half awarded to Rainer Weiss, the other half jointly to Barry C. Barish and Kip S. Thorne for decisive contributions to the LIGO detector and the observation of gravitational waves. On 14 September 2015, the universe's gravitational waves were observed for the very first time. The waves, which were predicted by Albert Einstein a hundred years ago, came from a collision between two black holes. It took 1.3 billion years for the waves to arrive at the LIGO detector in the USA. The signal was extremely weak when it reached Earth, but is already promising a revolution in astrophysics. Gravitational waves are an entirely new way of observing the most violent events in space and testing the limits of our knowledge.

The Nobel Prize in Chemistry 2017 was awarded to Jacques Dubochet, Joachim Frank and Richard Henderson for developing cryo-electron microscopy for the high-resolution structure determination of biomolecules in solution. Their development of an effective method for generating three-dimensional images of the molecules of life. Using cryo-electron microscopy, researchers can now freeze biomolecules mid-movement and portray them at atomic resolution. This technology has taken biochemistry into a new era.

The Nobel Prize in Literature for 2017 is awarded to the English author Kazuo Ishiguro who, in novels of great emotional force, has uncovered the abyss beneath our illusory sense of connection with the world. Sara Danius described Kazuo Ishiguro's writing style as a mix of Jane Austen and Franz Kafka: But you have to add a little bit of Marcel Proust into the mix, and then you stir. Kazuo Ishiguro has been a full-time author ever since his first book, A Pale View of Hills (1982). Both his first novel and the subsequent one, An Artist of the Floating World (1986) take place in Nagasaki a few years after the Second World War. The themes Ishiguro is most associated with are already present here: memory, time, and self-delusion. This is particularly notable in his most renowned novel, The Remains of the Day (1989), which was turned into film with Anthony Hopkins acting as the duty-obsessed butler Stevens. Ishiguro's writings are marked by a carefully restrained mode of expression, independent of whatever events are taking place. At the same time, his more recent fiction contains fantastic features. With the dystopian work Never Let Me Go (2005), Ishiguro introduced a cold undercurrent of science fiction into his work. In this novel, as in several others, we also find musical influences. A striking example is the collection of short stories titled Nocturnes: Five Stories of Music and Nightfall (2009), where music plays a pivotal role in depicting the characters' relationships. In his latest novel, The Buried Giant (2015), an elderly couple goes on a road trip through an archaic English landscape, hoping to reunite with their adult son, whom they have not seen for years. This novel explores, in a moving manner, how memory relates to oblivion, history to the present, and fantasy to reality.

https://www.nobelprize.org/

The Norwegian Nobel Committee has decided to award the Nobel Peace Prize for 2017 to the International Campaign to Abolish Nuclear Weapons (ICAN). The organization is receiving the award for its work to draw attention to the catastrophic humanitarian consequences of any use of nuclear weapons and for its ground-breaking efforts to achieve a treaty-based prohibition of such weapons.

The Royal Swedish Academy of Sciences has decided to award the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2017 to Richard H. Thaler University of Chicago, IL, USA "for his contributions to behavioural economics". Richard H. Thaler has incorporated psychologically realistic assumptions into analyses of economic decision-making. By exploring the consequences of limited rationality, social preferences, and lack of self-control, he has shown how these human traits systematically affect individual decisions as well as market outcomes.

Carlos Rolz El Editor