

Media invitation, October 2, 2023

Dr. Josef Steiner Cancer Research Award 2023 goes to geneticist

The Dr. Josef Steiner Cancer Research Award 2023, endowed with 1 million Swiss francs and originally referred to as the "Nobel Prize for Cancer Research", is awarded to Dr. Inigo Martincorena of the Wellcome Sanger Institute, Cambridge, UK, for his research into the development of cancer. The prize will be awarded on Friday, October 6, 2023 at the University of Bern.

The Board of the Dr. Josef Steiner Cancer Foundation, consisting of physiologists from the Universities of Bern, Geneva, and Zurich under the direction of the University of Bern, awards the Dr. Josef Steiner Cancer Research Prize 2023 to Dr. Inigo Martincorena, research group leader at the Wellcome Sanger Institute, Cambridge, UK. Dr. Martincorena is awarded the prize in recognition of his pioneering research in understanding mutations in healthy tissues and their effect on the development of cancer.

The research prize for the promotion of cancer research, bequeathed by the Biel/Bienne pharmacist Dr Josef Steiner in the 1980s, is being conferred for the 23rd time. This prestigious prize is awarded every second year for an outstanding and innovative cancer research project and comprises a research grant of 1 million Swiss francs and a personal award of 50,000 Swiss francs.

Understanding how a healthy cell can turn into a cancer cell

The genetic material of human body cells is prone to many mutations. By middle age, most of our cells have accumulated between 1,000 and 2,000 mutations. In rare cases, this causes a healthy cell to develop into a cancer cell, which in turn may result in a tumor. For a long time, little was known about the earliest stages in this development. One reason for this was the technical challenges involved in detecting mutations in a few or single cells. In recent years, Martincorena and his colleagues have undertaken pioneering work in this field. With his innovative sequencing methods, he has shown how unexpectedly numerous and diverse the mutations in healthy human tissues can be. His studies have provided important insights into the role these mutations play in the earliest stages of cancer development and in the aging process.

Martincorena's latest sequencing method makes it possible for the first time to carry out large-scale analyses of individual DNA molecules for mutations in any tissue type. This includes non-invasive samples, such as buccal swabs, which can be easily collected from large numbers of people. The Dr. Josef Steiner Cancer Research Prize will enable Martincorena to conduct a large study on

healthy identical and non-identical pairs of twins. He will genetically analyze 1,000 buccal swabs and compare it to data on the subjects' lifestyle habits, exposures, and disease history. In this way, he will be able to investigate the interaction of hereditary predisposition, environmental factors, lifestyle, and aging, as well as the influence of these factors on the mutation process.

The president of the Foundation's board, Prof. Dr. med. Stephan Rohr, Department of Physiology at the University of Bern, says of the award winner: "Among the many outstanding applications for the 23rd Dr. Josef Steiner Cancer Research Award, we selected Dr. Martincorena's project because his method makes it possible for the first time to systematically study the development of cancer-causing mutations in all organs. The award will support Dr. Martincorena's analysis of samples from large patient groupings. This should result in fundamental new insights into the factors that promote the development and spread of cells with cancer-causing mutations. This knowledge is the indispensable basis for the development of new strategies for cancer prevention."

Short biography of Inigo Martincorena

Inigo Martincorena graduated in Biology and Biochemistry at the University of Navarra, Spain, in 2007. In 2012, he obtained his PhD in evolutionary genomics at the University of Cambridge and the European Bioinformatics Institute of the European Molecular Biology Laboratory (EMBL-EBI) before moving to the Wellcome Sanger Institute in Cambridge for a three-year postdoctoral fellowship. Since 2016, he has been the leader of its Somatic Evolution Group.

The Dr. Josef Steiner Cancer Research Award

In order to promote cancer research efficiently and sustainably in the spirit of the founder, each Dr. Josef Steiner Cancer Research Award is bestowed on an outstanding research project of a young investigator in this field. The first prize winner to be honored was Dr. Peter Cerutti of Switzerland in 1986. Since then, numerous exceptional researchers from Europe, the US, and Australia have received the Dr. Josef Steiner Cancer Research Award. It has been conferred every second year since 1998. The winning project is supported for a period of four years with a total of 1 million Swiss francs. It is the most highly-endowed award by a private foundation in the world and was originally referred to as the "Nobel Prize for Cancer Research". The winning project is selected following a multi-stage process which takes into consideration the scientific quality, the originality, the qualification of the project authors and the feasibility of the proposed studies.

The Dr. Josef Steiner Cancer Foundation

Dr. Josef Steiner, former proprietor of "Dr. Steiner's Pharmacy and Railway Station Pharmacy" in Biel/Bienne, left behind a large fortune when he died in 1983. In accordance with his will, the entire fortune was to be used to establish the Dr. Josef Steiner Cancer Foundation. The aim of the foundation is to promote cancer research and honor worthy scientists in all areas of cancer research. The Board of the Dr. Josef Steiner Cancer Foundation consists of full professors from the Physiology Departments of the Universities of Bern, Geneva, and Zürich. In accordance with Dr. Steiner's will, the Board is chaired by a member from Bern, currently Prof. Stephan Rohr.

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Details on the award ceremony and the contact person will be found on the next page.

Media representatives are cordially invited to the public award ceremony:

Bestowal of the Dr. Josef Steiner Cancer Research Award 2023

Date/time: Friday, October 6, 2023, 17:00

Venue: University of Bern, Auditorium of the Main Building, Hochschulstrasse 4,
3012 Bern

During this year's award ceremony, the [Dr. Josef Steiner Cancer Research Award 2021](#) will be awarded to Prof. Dr. Andrea Ablasser retrospectively. Due to the Corona pandemic, the 2021 award ceremony could not take place.

For more information: <https://www.steinerstiftung.unibe.ch/>

Contact person:

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