

2026 LOUIS-JEANTET FOUNDATION PRIZES

The 2026 Louis-Jeantet Foundation Prizes are awarded to **YASMINE BELKAID**, President of the Institut Pasteur, Paris, France, and to **FIONA DOETSCH**, professor at the Biozentrum, University of Basel, Switzerland.



2026 Collen-Jeantet Prize for Translational Medicine

YASMINE BELKAID, an Algerian, American and French scientist, is awarded the 2026 Collen-Jeantet Prize for Translational Medicine for illuminating the complex interplay between the microbiota, nutrition, infection, and the immune system, transforming our understanding of host defence and tissue homeostasis.

Yasmine Belkaid's work explores fundamental mechanisms that regulate tissue structural and functional integrity and host immune responses. She uncovered key roles for the microbiota and dietary factors in the control of immunity and protection from pathogens.



2026 Louis-Jeantet Prize for Medicine

FIONA DOETSCH, a Canadian scientist, is awarded the 2026 Louis-Jeantet Prize for Medicine for discovering the identity of neural stem cells in the adult mammalian brain and for demonstrating that they enable mammals to adapt to specific physiological states.

Fiona Doetsch's work has shown that neural stem cells in the adult mammalian brain are not only shaped by their local environment but are also dynamically orchestrated by distant physiological signals, through a process of "neurogenesis on demand". Her findings reveal a new level of brain plasticity, with major implications for brain repair and regeneration.

The LOUIS-JEANTET FOUNDATION endows each of the two prizes with CHF 500,000, of which CHF 450,000 is intended to finance the continuation of the prize-winners' research and CHF 50,000 is for their personal use.

THE AWARD CEREMONY WILL BE HELD IN GENEVA (SWITZERLAND) ON **WEDNESDAY, APRIL 22nd, 2026**.

YASMINE BELKAID

Yasmine Belkaid earned her Master's degree in Biochemistry from the University of Science and Technology Houari Boumediene in Algiers, Algeria and her PhD from the Institut Pasteur, France. After postdoctoral training at the National Institutes of Health in the United States, she launched her independent research program at the Children's Hospital Research Foundation in Cincinnati. In 2005, she joined the National Institute of Allergy and Infectious Diseases, where she served as Chair of the Laboratory of Host Immunity and Microbiome, Director of the trans-NIH Center for Human Immunology, and Founder and Director of the NIAID Microbiome Program. In 2024, she returned to Europe and is currently President of the Institut Pasteur and Head of the Metaorganism Laboratory.

Barrier Immunity

Yasmine Belkaid has explored how our bodies coexist with the countless microbes that live on and inside us. Her research focuses on "barrier sites" such as the gut, skin, and lungs - tissues that host rich microbial communities and are constantly exposed to environmental antigens. Our immune system is designed to protect us against harmful pathogens while tolerating harmless and useful microbes, the so-called microbiota, and inputs, including food. When immune responses at these sites are not properly regulated, the result can lead to conditions such as allergies, inflammatory bowel disease, or psoriasis.

Bringing together immunology, microbiology and modern genomic tools, Yasmine Belkaid's work has shown how the microbiota helps train the immune system and guides our ability to tolerate everyday food and environmental exposures. She has uncovered key roles for nutrition and metabolites, particularly vitamin A, in shaping immunity in different human populations. Her team has also demonstrated how the immune system detects ancient viral sequences embedded in our DNA, using these once-dismissed "junk" elements to control inflammation and help tissues recover after injury.

Her work points to new ways to improve health, including microbiota-informed vaccines, dietary or metabolic approaches to boost barrier immunity, and strategies to prevent or reverse inflammation and immune damage triggered by infections. Her research continues to reshape our understanding of the essential partnership between humans and their microbial companions.

FIONA DOETSCH

Fiona Doetsch obtained her Bachelor's at McGill University in Montreal, Canada and her PhD at Rockefeller University in New York City, USA. She was a Junior Fellow of the Society of Fellows at Harvard University and a Fellow at the Radcliffe Institute for Advanced Studies before joining Columbia University as faculty in 2003. In 2014, she moved to Switzerland, where she is now the professor of Molecular Stem Cell Biology at the Biozentrum, University of Basel.

Stem cells in the adult mammalian brain: A new source of brain plasticity

For over a century, it was thought that mammals stop producing neurons not long after birth. Fiona Doetsch discovered the identity of neural stem cells in the adult mammalian brain and showed that physiological stimuli can regulate different stem cell pools to generate specific types of neurons and glial cells. Identifying the signals that regulate these stem cells is key to understanding how the brain learns, adapts and heals.

Most stem cells in the adult brain are dormant, yet they remain attuned to signals from their environment. Fiona Doetsch and her team have uncovered networks of signals that precisely govern these stem cells to maintain their dormant state or activate them to divide and differentiate. These signals include molecular pathways active within the cells themselves, cues from nearby blood vessels and cerebrospinal fluid, and even inputs from neurons located in distant brain regions that "fire" in different contexts. Strikingly, distinct groups of adult stem cells respond to different situations. Some become activated during pregnancy or from changes in hunger and satiety, while others are triggered during different types of regeneration, with each pool giving rise to specific types of neurons and glia cells. The transient activation of pools of dormant stem cells in different physiological states enables finely tailored remodelling of the adult brain.

By identifying adult neural stem cells and uncovering how they are activated, Fiona Doetsch's work has revealed their critical role in brain plasticity and behaviour. These discoveries have shaped our understanding of how the brain changes and adapts, with powerful implications for both fundamental biology and medicine, in particular for strategies aimed at brain repair and regeneration.

THE LOUIS-JEANTET FOUNDATION PRIZES

Every year, the Louis-Jeantet Foundation awards two Prizes distinguishing leading-edge researchers who are active in the member states of the Council of Europe. As one of the best-endowed awards, the Prizes foster scientific excellence. They are not intended solely as the recognition of work that has been completed, but also to encourage the continuation of innovative research projects. The Louis-Jeantet Prize for Medicine rewards work in the field of biomedical research, both in its fundamental and clinical aspects. The Collen-Jeantet Prize for Translational Medicine recognises a major advance close to practical applications for combating illnesses affecting humankind.

Established in 1986, the Prizes have thus far been awarded to 109 researchers: 30 in the United Kingdom; 24 in Germany; 18 in Switzerland; 16 in France; 4 each in Italy, the Netherlands and Sweden; 2 each in Austria, Belgium, Finland and Norway; and 1 in Hungary. Among the prize-winners, 16 have subsequently won the Nobel Prize in Physiology or Medicine, or the Nobel Prize in Chemistry.

Since 1986, a total sum of more than CHF 68 million has been awarded by the Foundation to the 109 prize-winners for the continuation of their work.

THE LOUIS-JEANTET FOUNDATION

Founded in 1983, the Louis-Jeantet Foundation is the legacy of Louis Jeantet, a French businessman and a citizen of Geneva by adoption. The Foundation's aim is to move medicine forward and to defend the role and identity of European biomedical research in the framework of international competition. Established in Geneva, the Foundation is part of an open Europe and devotes its efforts to recognising and fostering medical progress for the common good.

The Louis-Jeantet Foundation allocates some CHF 2.5 million each year to promoting biomedical research. It invests this sum for European and for local research projects. At the local level, the Foundation encourages teaching and the development of research at the Faculty of Medicine of the University of Geneva.

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