



2014 Louis-Jeantet Prize For Medicine Winners Announced



The 2014 Louis-Jeantet Prize For Medicine is awarded to the Italian biochemist **Elena Conti**, Director of the Department of Structural Cell Biology at the Max-Planck Institute of Biochemistry in Munich (Germany) and to **Denis Le Bihan**, the French medical doctor, physicist and Director of NeuroSpin, an institute at the French Nuclear and Renewable Energy Commission (CEA) at Saclay near Paris.

The Louis-Jeantet Foundation grants the sum of CHF 700,000 for each of the two 2014 prizes, of which CHF 625,000 is for the continuation of the prize winner's work and CHF 75,000 for their personal use.

The prize winners are conducting fundamental biological research which is expected to be of considerable significance for medicine.

Elena Conti is awarded the 2014 Louis-Jeantet Prize for Medicine for her important contributions to understanding the mechanisms governing ribonucleic acid (RNA) quality, transport and degradation.

In order to function properly, our cells need to degrade macromolecules that are faulty or no longer needed. The biochemist deciphered at the level of atomic resolution how faulty RNAs are recognised and eliminated.

Notably, her group deciphered the three-dimensional architecture and molecular mechanisms of the exosome, a multiprotein complex that recognises and degrades RNAs. The work revealed that several principles of the mechanism of this essential nano-machine are conserved in different forms of life.

Elena Conti will use the prize money to conduct further research into the structure and regulation of the exosome.

Denis Le Bihan is awarded the 2014 Louis-Jeantet Prize for Medicine for the development of a new imaging method that has revolutionised the diagnosis and treatment of strokes.

This medical doctor and physicist developed a highly innovative technique of brain imaging, diffusion MRI. It is currently a key method for detecting strokes, for quickly commencing treatment and thus for improving life for numerous patients. The technique has also been used for detecting cancer, and for mapping the fibres connecting different brain regions, thus opening the way for a better understanding of Alzheimer's disease, of autism, schizophrenia and neurological disorders.

Denis Le Bihan will use the prize money to continue work on understanding the mechanisms governing water diffusion in the brain, and to develop new applications for diffusion MRI in medicine.

The award ceremony will be held in Geneva (Switzerland) on Wednesday, 9 April 2014.

Additional information on the winners, the award and the foundation can be found [on the foundation's website.](#)

Source: [Louis Jeantet Foundation](#)

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