OIST PRESIDENTIAL LECTURE

Lipid Rafts and Lipidomics for Health and Disease

Fri, May 31
Center B250 13:30 to 15:00

Lipids are important building blocks of life. Their main function is to form the matrix of our cell membranes. Prof. Simons' group made a ground-breaking discovery, showing that lipids form special functional domains in the cell membrane by a process resembling a phase transition (like the changes from water to ice). In addition to this, he will talk about a method to analyse lipids, totally quantitatively, in blood cells and plasma, which establishes multi-parametric lipid signatures to evaluate health and disease.

Prof. Kai Simons

CEO of Lipotype GmbH

Director Emeritus, Max Planck Institute of Molecular Cell Biology and Genetics

Prof. Dr. Kai Simons received his MD from the University of Helsinki in 1964 and completed a postdoctoral fellowship at Rockefeller University in 1967. He then returned to Helsinki before moving to EMBL in 1975, where he established a Cell Biology program. He later became the Founding Director for the Max Planck Institute of Molecular Cell Biology and Genetics (MPI-CBG), and currently holds the title of Director Emeritus there. In 2012, Simons became the CEO of the start-up biotech company Lipotype GmbH, which is a spinoff of his and Dr. Andrej Shevchenko's work at MPI-CBG.

Simons has received numerous awards for his work on lipid membranes, including the Koch Gold Medal in 2016 and election as a foreign member of the National Academy of Sciences in the USA.