

Körber European Science Prize

Trustee Committee

Prof. Dr. Edith Heard
EMBL Heidelberg, Germany



Photo: Edith Heard

Professor Edith Heard obtained her PhD from the Imperial Cancer Research Fund (later Cancer Research UK), London. Thereafter, she spent nine years at the Institut Pasteur in Paris, before undertaking a one-year sabbatical at Cold Spring Harbor in the USA. In 2001, she set up her group at the Institut Curie and in 2010 became Director of the Institute's Genetics and Developmental Biology Unit. Edith was appointed as a Professor of the Collège de France in 2012, holding the Chair of Epigenetics and Cellular Memory. In January 2019, Edith started as Director General of EMBL.

Edith's group was among the first to show that the epigenetic process of X-chromosome inactivation (XCI), whereby one of a female's two X chromosomes is silenced during development, is remarkably dynamic. In collaboration with Job Dekker, Edith's group was also one of the first to describe topologically associating domains (TADs) – a new principle of chromosome folding whereby regions of DNA preferentially interact with each other to partition the genome into functionally distinct domains. Edith's group showed that this organisation is crucial for the initiation of XCI, as well as being intimately linked to gene expression dynamics. Edith's current research focuses on understanding how chromatin and chromosome organisation participate in gene regulation.

Edith and her laboratory have been recognised by many prizes, most recently the Hansen Family Award, Inserm Grand Prix, the European Society for Human Genetics Award and the Prix René et Andrée Duquesne of la Ligue contre le cancer. Edith is an Honorary Fellow of Emmanuel College, at the University of Cambridge, a Fellow of the Royal Society and an EMBO member.

Edith has participated in numerous scientific boards and is currently a member of the Scientific Advisory Board of the CNRS (France), the BRIC (Copenhagen, Denmark), the IMBB (Crete, Greece) and the Crick Institute (London, UK).