From Signaling to Chromatin Epigenetics

Post doc position

The Hirt Lab

In my lab at KAUST, a totally independent multinational university on the Red Sea shore near Jeddah, a Post-Doc position is available to investigate the link between signaling and chromatin epigenetics in the context of innate immunity.

The involvement of phosphorylation cascades in plant innate immunity has been clearly established. Among these, different MAPKs play a prominent role. Recently, a role of epigenetic events in defense has received increasing attention with the hope to better understand processes such as systemic acquired resistance and plant innate memory. But until recently, the link between epigenetics and signaling remained elusive.

In my laboratory (see [https://cda.kaust.edu.sa/Pages/Heribert%20Hir.aspx](https://cda.kaust.edu.sa/Pages/Heribert%20Hir.aspx)), we have established different phosphoproteomic methods to identify protein chromatin targets upon pathogen-induced activation of MAPK signaling cascades. A post-doctoral position is available to study the role of novel targets in defense gene expression and innate immunity memory. A range of methods will be applied in the project ranging from genetic and biochemical methods, TAP-tag purification and analysis of protein complexes by mass spectrometry, confocal microscopy, RNAseq, ChIPseq and various bioinformatic tools.

Candidates should have experience in molecular biology, biochemistry and bioinformatics. Candidates should send a full cv and two reference letters of their last positions to heribert.hirt@kaust.edu.sa