

# **Marit Ackermann**

Cellular Networks and Systems Biology  
Biotechnology Center  
TU Dresden

## ***Assessing the impact of natural genetic variation on gene expression dynamics***

Natural genetic variation affects gene expression levels and thereby impacts on molecular and physiological phenotypes such as protein levels, cell morphology or disease phenotypes. A genetic locus containing a sequence variant that affects transcript levels of a gene is called an expression quantitative trait locus (eQTL). Differences in mRNA expression levels caused by natural genetic variation can manifest themselves between individuals, populations, environments and, very importantly, between cell types and tissues.