

Sodium transport in plant cells (Ekkehard Neuhaus)

Excess salinity provokes impaired metabolism and development in plants. Plants process various transport proteins able to transport Na⁺, e.g. the plasma membrane located SOS1 protein, various intracellular-located NHX carriers, a Na⁺/pyruvate Co-transporter in the plastid envelop or a Na⁺/Pi co-transporter located in the thylakoid system. Within this project we will decipher the physiological impact of selected Na⁺ transporting proteins in more detail. In particular we focus on the coordinated intracellular movement of sodium under control and salt-stress conditions.