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**HOW AUXIN TURNS GENES ON – REGULATED PROTEIN DESTRUCTION  
AT THE HEART OF AUXIN SIGNALLING**

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Auxin plays a pivotal role in many important aspects of plant growth and development. Central to auxin response are changes in gene expression that hinge on complex interactions between two families of transcription factors: The Auxin Response Factors or ARFs, of which there are 23 in Arabidopsis, and the Aux/IAA repressor proteins of which there are 29 in Arabidopsis. We have previously shown that auxin prompts the expression of auxin-regulated genes by causing the ubiquitin-dependent proteolysis of Aux/IAA proteins and that this is catalysed by an SCF-type ubiquitin-ligase complex called SCFTIR1. More recently we have also shown that the regulation of the interaction between SCFTIR1 and Aux/IAAs depends of the direct binding of auxin to the F-box protein TIR1, and hence that TIR1 is a receptor for transcriptional responses to auxin.