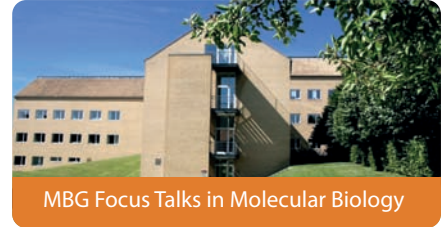


MBG FOCUS TALK

hosted by section for Plant Molecular Biology



Wednesday 14th December at 13:00-14:00

Meeting room 2, AU conference centre, Fredrik Nielsens Vej 4 (Building 1421)

Dr Wolfgang Busch

Gregor Mendel Institute of Molecular Plant Biology, Vienna, Austria

The Genetic Patterns Underlying Intraspecies and Interspecies Root Growth Variation

Understanding which genes, variants, and genetic mechanisms determine the tremendous variety of phenotypes that are observed in living being is the central question of genetics. Recent approaches in phenotyping and sequencing have enabled scientists to approach this question at an unprecedented depth and scale. Over the past years we have identified key genes, their variants, and the functional networks that underlie variation in root growth and root growth responses to the environment in the model species *Arabidopsis thaliana*, a member of the *Brassicaceae* family. While we are making rapid progress in determining the genetic basis of root growth variation in *Arabidopsis*, an important question remains: whether, and to which extent, what we discover in one species is true for other species. To address this question, we have recently applied the same analytical methods to the model legume *Lotus japonicus*. I will present some of our key findings in *Arabidopsis* and *Lotus*, and highlight emerging themes and outstanding questions.