



Mendel Centre Seminar

# The importance of localized auxin production for morphogenesis of embryos in *Arabidopsis*



**13/10/2015**

TUESDAY

**start 16:00**

delivered by

Seminar room 252, building A29  
University Campus Bohunice  
Kamenice 5, Brno

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## Abstract:

Plant sexual reproduction involves a tightly coordinated developmental process that is essential for effective fertilization and production of viable seeds. The phytohormone auxin is one of the key endogenous signalling molecules controlling initiation and development of plant organs. In particular, its uneven distribution, resulting from tightly controlled production, metabolism and directional transport, is an important morphogenic factor. In my talk I will review the work done during my post-doc years, as the base of our current work. I will discuss how developmentally controlled and localized auxin biosynthesis and transport contribute to the coordinated development of embryos via the regulation of auxin levels and distribution within and around them. The links between de novo local auxin biosynthesis, auxin transport and/or signalling will be presented to highlight the importance of the non-cell autonomous action of auxin production on development and morphogenesis of embryos. Last, but not least, an overview of the current working projects will be discussed.