A KJELDGAARD LECTURE

Friday 9 November 2018 at 13:15
1593 - 012, (iNANO-aud.)
Same location for the PhD session

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The genetic basis for diversification of leaf form: from understanding to reconstructing

A key challenge in biology is to understand how diversity in organismal form is generated. While key regulators that shape the body plans of model organisms have been identified, less is known about how the balance of conservation versus divergence of relevant developmental pathways influences cell growth to generate morphological diversity. To help address this issue, we developed the *Arabidopsis thaliana* relative *Cardamine hirsuta* into a versatile system for studying morphological evolution. We use a combination of genetics, advanced imaging and computational modelling to understand the mechanisms through which leaf morphology evolved in these species, resulting in simple leaves in *A. thaliana* and complex leaves with leaflets in *C. hirsuta*. Here, I will present our findings on identifying such mechanisms and in conceptualizing how they regulate the number, position and timing of leaflet production. I will also discuss progress on understanding the physiological relevance of these different leaf shapes.

Host: Stig Uggerhøj Andersen, Plant Molecular Biology
Department of Molecular Biology and Genetics, Aarhus University

The lecture will be followed by a chalk-board session for PhD students

The Kjeldgaard Lecture Series is organised by
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