BioISI Research Seminar

BioISI
Biosystems and Integrative Sciences Institute

Insights into the molecular control of wood and cork formation from cambial stem cells

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BioISI / FCUL

Secondary growth is a central process in plant development that allows stems and roots to grow radially. This type of growth is mediated by the activity of a specialised type of plant stem cells, the vascular cambium and the cork cambium, forming cylindrical domains below the organ surface. Upon activation, the vascular cambium develops secondary xylem (wood) and secondary phloem in a bidirectional manner. In a similar way, the cork cambium develops phellem (cork) and pheloderm to form a protective periderm. The molecular regulation of wood and cork cell differentiation from the cambia involves a complex network of transcription factors and hormone signaling pathways. Several examples of our work focusing on the identification of such regulators, and on the characterization of the role of a polyamine and a GRAS family transcription factor in the control of wood and cork formation, respectively, will be presented.

Host: Rui Malhó
(PFG-BioISI)

When: November 15 🕛 12h00
Where: Building C1, room 1.3.14
Faculdade de Ciências da Universidade de Lisboa -Campo Grande, Lisboa (Portugal)

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