

Cited From The Deed

Given to the winner of the Horst Wiehe-Prize of the German Botanical Society (DBG) for 2013: Dr. Martin Bringmann

“Already in the early 1960s, Paul Green and others proposed a model in which the cellulose microfibrils, i.e. the main load bearing fibers surrounding plant cells, are synthesized parallel to the underlying microtubules, a crucial component of the cytoskeleton. This relationship was coined as the alignment hypothesis, but the mechanism governing this hypothesis remained obscure.

During his PhD in the group of Dr. Staffan Persson from the Max-Planck-Institute for Molecular Plant Physiology, Martin Bringmann discovered underlying principles for this longstanding question; firstly, he assisted in the identification of Cellulose Synthase Interacting 1 (CSI1), which was the first protein, apart from the cellulose synthases (CesAs), that takes part in the cellulose synthesizing complex. Secondly, he found that deletion of the protein function abolished the connection between the CesA complex and the underlying microtubules. Together with several other observations, these discoveries resolved the molecular mechanism underlying the directed synthesis of cellulose by the microtubules, and provide the platform for a better understanding of anisotropic growth in plant cells”.

Tübingen, September 2013
Prof. Dr. Karl-Josef Dietz,
President of the Deutsche Botanische Gesellschaft (DBG)

More about the Horst Wiehe-Prize:

<http://www.deutsche-botanische-gesellschaft.de/html/045WieheAward.html>