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## **PIN protein phosphorylation by plant AGC3 kinases and its role in polar auxin transport**

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**Fang Huang**

Front cover      Detection of *PIN1::GFP* (green) and *DR5::GFP* auxin reporter (blue) expression in an *Arabidopsis* primary root prestained with propidium iodine (red) using confocal laser scanning microscopy

Back cover      A defective flower of *Arabidopsis* loss-of-phosphorylation *PIN1::GFP S→A* mutant plant

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# **PIN protein phosphorylation by plant AGC3 kinases and its role in polar auxin transport**

## **Proefschrift**

Ter verkrijging van  
de graad van Doctor aan de Universiteit Leiden,  
op gezag van Rector Magnificus prof. mr. P.F. van der Heijden,  
volgens besluit van het College voor Promoties  
te verdedigen op woensdag 1 september 2010  
klokke 15:00 uur

door

**Fang Huang**

geboren te Jining (Shandong, China)  
in 1979

## Promotiecommissie

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一分耕耘,一分收获  
**No pains, no gains**

献给我的父母和我的爱人  
***For my parents and my husband Luning Liu***



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