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## Orphan nuclear receptor TR4 and fibroblast growth factor 1 in metabolism

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**Orphan Nuclear Receptor TR4 and  
Fibroblast Growth Factor 1 in Metabolism**

*In memory of our beloved professor, friend and brave fighter  
dr. Marten Hofker*

Weilin Liu

The work in this thesis was carried out at the Department of Pediatrics, Center for Liver, Digestive, and Metabolic Diseases, University Medical Center Groningen, University of Groningen, Groningen, The Netherlands.

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# **Orphan Nuclear Receptor TR4 and Fibroblast Growth Factor 1 in Metabolism**

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致我最亲爱的妈妈, 爸爸, 妻子和女儿

*To Mom, Dad, Fan and Emma*

## **Paranimfen**

Tim van Zutphen

Ana Patricia Huerta Guevara

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