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## 3D liver models in tissue engineering and toxicology

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**3D Liver Models**  
**in**  
**Tissue Engineering and Toxicology**



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university of  
groningen

# **3D liver models in Tissue Engineering and Toxicology**

**PhD thesis**

to obtain the degree of PhD at the  
University of Groningen  
on the authority of the  
Rector Magnificus Prof. E. Sterken  
and in accordance with  
the decision by the College of Deans.

This thesis will be defended in public on

Friday 23 December 2016 at 14:30 hours

by

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When we look at *something* and think: it is not reachable as a cloud in the sky,  
we should realize that this *something* can become our sail one day.

(In this thesis, *something* refers to a bioartificial liver and safer medicines)



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