

Tijmen Harmen Booij



Personal Information

Tijmen Harmen Booij

Morsweg 178A
2332ES Leiden
The Netherlands

tijmen.booij@gmail.com

+31 6 42653992

Male

26-Nov-1988

Skills

- Organoid culture
- High-throughput screening
- Handling large data sets
- High-content analysis
- Laboratory automation
- Molecular biology

Languages

- Dutch
- English
- German
- French



www.linkedin.com/in/t-h-booij

Profile

I am a cell biologist specialized in 3D organoid cultures in the context of phenotypic high-throughput screening. By developing and applying these advanced cellular models, I can add a new dimension to in vitro drug research that can contribute to the selection of more promising drug candidates and help improve the understanding of disease processes.

Education

- M.Sc. Bio-Pharmaceutical Sciences (cum laude)** **2010-2013**
Leiden University, Leiden (NL)
- B.Sc. Bio-Pharmaceutical Sciences** **2007-2010**
Leiden University, Leiden (NL)
- V.W.O.** **2001-2007**
Murmellius Gymnasium, Alkmaar (NL)

Professional Experience

- Leiden Academic Centre for Drug Research, Leiden (NL)** **2013-2017**
PhD Candidate at the Division of Toxicology
 - Responsible for developing and using a robust 3D cyst-culture screening platform to find therapies against polycystic kidney disease
 - Developing and miniaturizing a 3D cell culture model for osteosarcoma cell lines
 - Applying and optimizing bioinformatics tools for phenotypic analysis on 3D-cultured microtissues (R/KNIME/Ominer)
 - Supervision of B.Sc. level and M.Sc. level student interns and teaching of B.Sc. level courses
- Eidgenössische Technische Hochschule (ETH), Zürich (CH)** **2012 (6-month)**
Intern at the Institute of Molecular Health Sciences
 - Investigating the role of MMP10 in wound healing in vivo and in vitro
- Ocello B.V. and LACDR, Leiden (NL)** **2012 (3-month)**
Research assistant at the Division of Toxicology
 - Screening molecule libraries in a collaborative effort between academic institutions and industry
 - Analyzing and reporting research findings
- LACDR, Leiden (NL)** **2011 (3-month)**
Research assistant at the Division of Toxicology
 - Performing PCR on mouse tissue lysates
 - Evaluating and reporting mouse genotype
- LACDR, Leiden (NL)** **2011 (9-month)**
Intern at the Division of Toxicology
 - Developing 3D screening technology for prostate cancer cells
 - Miniaturization of this screening platform for lab automation
 - Applying bioinformatics tools for phenotypic analysis (R/KNIME)
- LACDR, Leiden (NL)** **2010 (3-month)**
Intern at the Division of Toxicology
 - Responsible for optimization of 3D cell culture conditions for prostate cancer cell lines

Honours and Awards

- Tony B. Academic Travel Award (SLAS 2016) **2016**
- ImmunoTools IT-Box Award **2013**
- Suzanne Hovinga Award for best internship **2013**
- LACDR Spring Symposium poster award **2013**
- Tony B. Academic Travel Award (SLAS 2013) **2013**

Scientific Publications

Development of a 3D tissue culture-based high-content screening platform that uses phenotypic profiling to discriminate selective inhibitors of receptor tyrosine kinases

Booij TH, Klop MJ, Yan K, Szántai-Kis C, Szokol B, Or L, van de Water B, Keri G, Price LS.
J Biomol Screen. 2016 Oct;21(9):912-22.

MEK inhibition induces apoptosis in osteosarcoma cells with constitutive ERK1/2 phosphorylation

Baranski Z, Booij TH, Kuijjer ML, de Jong Y, Cleton-Jansen AM, Price LS, van de Water B, Bovée JV, Hogendoorn PC, Danen EH.
Genes Cancer. 2015 Nov;6(11-12):503-12.

Aven-mediated checkpoint kinase control regulates proliferation and resistance to chemotherapy in conventional osteosarcoma

Baranski Z, Booij TH, Cleton-Jansen AM, Price LS, van de Water B, Bovée JV, Hogendoorn PC, Danen EH.
J Pathol. 2015 Jul;236(3):348-59.

Epac-Rap signaling reduces oxidative stress in the tubular epithelium

Stokman G, Qin Y, Booij TH, Ramaiahgari S, Lacombe M, Dolman ME, van Dorenmalen KM, Teske GJ, Florquin S, Schwede F, van de Water B, Kok RJ, Price LS.
J Am Soc Nephrol. 2014 Jul;25(7):1474-85.

Presentations

3D high-content screening of compound libraries to identify modulators of polycystic kidney disease

Booij TH, Bange H, van Westen G, Yan K, Fokkelman M, Leonhard WN, van de Water B, Peters DJM, Price LS.
Poster Presentation
SLAS 2016
San Diego, CA, USA

A 3D cell culture-based screening platform for the identification of effective therapies against human polycystic kidney diseases

Booij TH, Leonhard WN, Yan K, Qin Y, Zi D, van de Water B, Peters DJM, Price LS.
Poster Presentation
FASEB 2014
Lucca, Italy

A 3D tissue culture-based high-content screening platform that uses phenotypic profiling to identify selective inhibitors of cMet

Booij TH, Zi D, Klop M, Roovers R, van de Water B, Meerman J, Price LS.
Poster Presentation
SLAS 2013
Orlando, FL, USA

Certificates and Qualifications

Health physics expert -level 5B
3D cell based assays for drug de-risking
Study design and statistical analysis for HTS experiments
Laboratory animal sciences (article 9)
BioMek FX user training
Introduction to teaching

RID TU Delft (NL)
SLAS Conference 2013, Orlando (US)
SLAS Conference 2016, San Diego (US)
Leids Universitair Medisch Centrum, Leiden (NL)
Beckman Coulter
ICLON, Leiden (NL)