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State of the heart : the promise of pluripotent stem cell-derived cardiomyocytes in disease modelling, differentiation and development
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CHAPTER

Dankwood

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CHAPTER

Curriculum vitae

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Cathelijne Willemijne van den Berg was born on May 11th, 1986 in Rotterdam, the Netherlands.

She graduated from the gymnasium at CSG Johannes Calvijn in Rotterdam in 2004. She wanted to gain a thorough understanding of human health and disease and started her studies Biomedical Sciences at the Leiden University Medical Center in Leiden. During her Master she performed her first internship about the Regulation of Innate responsiveness in the Intestine under the supervision of Prof. Edward Nieuwenhuis, MD, PhD (department of Paediatrics, Erasmus Medical Center, Rotterdam). She moved to the Karolinska Institutet (Stockholm, Sweden) for an exchange program about Molecular Methods in Drug Development, followed by the course Science Based Business Fundamentals at the Faculty of Science (Leiden University). She was fascinated by the field of stem cell biology and performed her final internship in the laboratory of Prof. Christine Mummery, PhD (department of Anatomy and Embryology, the Leiden University Medical Center). She was supervised by Richard Davis, PhD and worked on mouse pluripotent stem cell models of a human cardiac sodium channelopathy. She received her Master's degree in 2010 and continued to work in the same laboratory as a PhD-candidate. In 2012 she was awarded the Beverly McKinnell Honorable Mention Award by the International Society of Differentiation at the conference Stem Cells, Development and Regulation in Amsterdam. The results of the research are presented in this thesis. In 2015 she started as a postdoctoral researcher in the laboratory of Prof. Ton Rabelink, MD, PhD (department of Nephrology, Leiden University Medical Center) to work on the generation of kidney organoids from pluripotent stem cells. In 2016 she received the Wiyadharma Fellowship for her research to develop a clinical application for patients with kidney failure.



CHAPTER

List of publications

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Journal publications

Cathelijne W. van den Berg*, Richard P. Davis*, Simona Casini, Stefan R. Braam, Christine L. Mummery

Pluripotent stem cell models of cardiac disease and their implication for drug discovery and development.

Trends in Molecular Medicine 17, 475-484 (2011)

Cathelijne W. van den Berg*, Richard P. Davis*, Simona Casini*, Maaïke Hoekstra, Carol Ann Remme, Cheryl Dambrot, Daniela Salvatori, Dorien Ward-van Oostwaard, Arthur A.M. Wilde, Connie R. Bezzina, Arie O. Verkerk, Christian Freund[†], Christine L. Mummery, PhD[†]

Cardiomyocytes derived from pluripotent stem cells recapitulate electrophysiological characteristics of an overlap syndrome of cardiac sodium channel disease.

Circulation 125, 3079-3091 (2012)

Cathelijne W. van den Berg, Satoshi Okawa, Susana M. Chuva de Sousa Lopes, Liesbeth van Iperen, Robert Passier, Stefan R. Braam, Leon Tertoolen, Antonio del Sol, Richard P. Davis, Christine L. Mummery

Transcriptome of human foetal heart compared with cardiomyocytes from pluripotent stem cells.

Development 142, 3231-3238 (2015)

Textbook publications

Cheryl Dambrot, Cathelijne W. van den Berg, Dorien Ward-van Oostwaard, Richard P. Davis, Stefan R. Braam, Elizabeth Ng, Christine L. Mummery

Cardiomyocyte Differentiation of Human Pluripotent Stem Cells.

Human Stem Cell Manual Second Edition, 413-431 (2012)

Cathelijne W. van den Berg, David A. Elliott, Stefan R. Braam, Christine L. Mummery, Richard P. Davis

Differentiation of Human Pluripotent Stem Cells to Cardiomyocytes Under Defined Conditions.

Patient-Specific Induced Pluripotent Stem Cell Models - Generation and Characterization

Series: Methods in Molecular Biology 1353, 163-180 (2016)

Scientific Awards

2012: Beverly McKinnell Honorable Mention Award by the International Society of Differentiation

*,[†] These authors contributed equally