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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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Citation

Berg, C. W. van den. (2016, October 26). *State of the heart : the promise of pluripotent stem cell-derived cardiomyocytes in disease modelling, differentiation and development*. Retrieved from <https://hdl.handle.net/1887/43820>

Version: Not Applicable (or Unknown)

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Cover Page



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

Issue Date: 2016-10-26



CHAPTER

Dankwood

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Graag wil ik op deze plaats iedereen bedanken die een bijdrage heeft geleverd aan het tot stand komen van dit proefschrift.

Prof. dr. C.L. Mummery, promotor. Beste Christine, bedankt voor de kansen die je mij hebt geboden tijdens mijn promotieonderzoek in jouw laboratorium. Jouw visie, enthousiasme en passie voor de wetenschap zijn inspirerend! Je snelle feedback op manuscripten en je onmisbare kennis op het gebied van stamcellen en cardiomyocyten zijn bijzonder waardevol.

Dr. R.P. Davis, co-promotor. Dear Richard, thank you for your confidence and the fantastic way in which you have guided and educated me to become a stem cell researcher. Together we formed an excellent scientific team: we could almost guess what the other was thinking. It was great to learn from someone with so much theoretical and practical expertise.

Prof. dr. Douwe Atsma, Prof. dr. Connie Bezzina, Prof. dr. Vincent Christoffels, Prof. dr. Marie José Goumans en Prof. dr. Robert Passier ben ik zeer erkentelijk voor het plaatsnemen in de leescommissie en het beoordelen van mijn proefschrift.

Graag wil ik alle co-auteurs bedanken voor hun bijdrage aan de manuscripten.

Speciale dank gaat uit naar alle collega's van de afdeling Anatomie en Embryologie. Dank jullie wel voor de samenwerking en de geweldige tijd tijdens mijn promotieonderzoek. Het was een voorrecht om in zo'n internationale groep te werken.

Vriend(inn)en en kennissen, dank voor de gezelligheid in de periode van mijn promotieonderzoek. Fijn om naast het pipetteren en schrijven te ontspannen met een etentje, een stedentrip, museumbezoek of genieten in de natuur.

Graag wil ik mijn familie bedanken voor hun interesse in mijn promotieonderzoek. Dank je wel voor jullie onvoorwaardelijke steun, luisterend oor, begrip, betrokkenheid, liefde en goede raad.



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 Wiyadharna 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