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Influencing the homing and differentiation of MNCs in hereditary hemorrhagic telangiectasia

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Curriculum vitae

Calinda Dingenouts was born on October 21st, 1986 in the city of Vlaardingen, the Netherlands. She graduated from the Schravenlant Lyceum (Schiedam) in 2005. In 2008, she obtained her Bachelor's diploma in Biomedical Sciences at Leiden University, Leiden, the Netherlands. As part of her study she did an internship at the department of Immunology, Erasmus Medical Centre, Rotterdam, the Netherlands. Here, she focused on the optimization of gene therapy for patients with RAG 1 and 2 Severe Combined Immunodeficiency, working with Dr. Karin Pike-Overzet and Mark Rodijk in Prof. Dr. Frank Staal's group.

In 2009, she followed the master Biomedical Sciences at Leiden University and obtained her Master's diploma in 2011. During her first Junior Research Project she joined the group of Dr. Niels De Wind, and under supervision of Dr. Giel Hendriks she studied the mechanisms involved in transcription-associated mutagenesis in mammalian stem cells, at the department of Toxicogenetics, Leiden University Medical Centre, Leiden, the Netherlands.

For her second Junior Research Project she joined the group of Prof. Dr. Antony Cooper, under additional guidance of Stephanie Kong and Kathryn Hill. She investigated the role of LRRK2 and alpha-synuclein in Parkinson's disease at the department of Diabetes and Obesity, the Garvan Institute of Medical Research, Sydney, Australia. This project was supported with individual grants by the Princess Beatrice Fund, the Leiden University Fund and the Leiden University 'Outbound Study' grant.

In 2012 she started her PhD studies in the group of Prof. Dr. Marie-José Goumans at the department of Molecular Cell Biology (now Cell and Chemical Biology) at the Leiden University Medical Center under the supervision of Dr. Wineke Bakker. The results of this work are presented in this thesis.

In 2017 she was appointed as a Post-doctoral scientist at the department of Infectious Diseases at the Leiden University Medical Center. Joining the group of Prof. Dr. Tom Ottenhoff and under supervision of Associate Prof. Dr. Simone Joosten, she is working on vaccine development for tuberculosis by characterizing specific T-cell subsets in patients with latent tuberculosis infection.



List of publications

1. Dingenouts C.K.E., Goumans M.J. and Bakker W. Mononuclear *cells and vascular repair in HHT*. *Frontiers in Genetics*. 2015 Mar 23;6:114. doi: 10.3389/fgene.2015.00114. eCollection 2015.
2. Dingenouts C.K.E., Bakker W., Lodder K., Wiesmeijer K.C., Moerkamp A.T., Maring J.A., Arthur H.M., Smits A.M., Goumans M.J. Inhibiting DPP4 in a mouse model of HHT1 results in a shift towards regenerative macrophages and reduces fibrosis after myocardial infarction. *PLoS One*. 2017 Dec 18;12(12):e0189805. doi: 10.1371/journal.pone.0189805. eCollection 2017.
3. Moerkamp A.T., Lodder K., van Herwaarden T., Dronkers E., Dingenouts C.K.E., Tengström F.C., van Brakel T.J., Goumans M.J., Smits A.M. *Human fetal and adult epicardial-derived cells: a novel model to study their activation*. *Stem Cell Res Ther*. 2016 Nov 29;7(1):174.
4. Moerkamp A.T., Leung H.W., Bax N.A.M., Holst S., Lodder K., Berends T., Dingenouts C.K.E., Choo A.B.H., Smits A.M., Goumans M.J. *Glycosylated cell surface markers for the isolation of human cardiac progenitors*. *Stem Cells and Development*. 2017 Sep 11. do: 10.1089/scd.2017.0048.
5. Maring J.A., Lodder K., Mol E., Verhage V., Dingenouts C.K.E., Moerkamp A.T., Wiesmeijer C.C., Deddens J.C., Vader P., Smits A.M., Sluijter J.P.G., Goumans M.J. Cardiac Progenitor Cell-Derived Extracellular Vesicles Reduce Infarct Size and Associate with Increased Cardiovascular Cell Proliferation. *J Cardiovasc Transl Res*. 2018 Nov 19. doi: 10.1007/s12265-018-9842-9.

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6. Dingenouts C.K.E.*, Moerkamp A.T.*, Lodder K., van Herwaarden T., Végh A.M.D., Dronkers E., Kruithof B.P.T., Wiesmeijer K.C., Maring J.A., Kruithof B.P.T., Arthur H.M., Goumans M.J., Smits A.M. *Endoglin deficiency alters the epicardial response following myocardial infarction*.
7. Dingenouts C.K.E.*, Bakker W.*, Lodder K., Wiesmeijer K.C., Moerkamp A.T., Mager H.J., Snijder R., Westerman C.C.J., de Vries M. R., Quax P.H.A., Goumans M.J. *BMP receptor inhibition enhances tissue repair in endoglin heterozygous mice*.
8. Dingenouts C.K.E., Lodder K., Moerkamp A.T., Kurakula K.B., Bakker W., Hoefler I.E., Arthur H.M., Goumans M.J. DPP4 inhibition enhances wound healing in endoglin heterozygous mice through modulation of macrophage signaling and differentiation.

*Both authors contributed equally