

List of Publications

Full papers

PA. Dijkmans, **LJM. Juffermans**, RJP. Musters, A. van Wamel, FJ. ten Cate, W. van Gilst, CA. Visser, N. de Jong, O.Kamp. *Microbubbles and ultrasound: from diagnosis to therapy*. European Journal of Echocardiography. 2004;5(4):245-56.

LJM. Juffermans, PA. Dijkmans, RJP. Musters, A. van Wamel, A. Bouakaz, FJ. ten Cate, L. Deelman, CA. Visser, N. de Jong, O.Kamp. *Local drug and gene delivery through ultrasound and microbubbles: a safe and efficient alternative for viral vectors?* Netherlands Heart Journal. 2004;12(9):398-403

LJM. Juffermans, PA. Dijkmans, RJP. Musters, CA. Visser, O. Kamp. *Transient permeabilization of cell membranes by ultrasound-exposed microbubbles is related to formation of hydrogen peroxide*. American Journal of Physiology – Heart and Circulatory Physiology. 2006;291(4):H1595-601

LJM. Juffermans, O. Kamp, PA. Dijkmans, CA. Visser, RJP. Musters. *Low-intensity ultrasound-exposed microbubbles provoke local hyperpolarization of the cell membrane via activation of BK_{Ca} channels*. Ultrasound in Medicine and Biology. 2008;34 (3):502-8.

LJM. Juffermans, BDM. Meijering, A. van Wamel, RH. Henning, K. Kooiman, M. Emmer, N. de Jong, W. van Gilst, RJP. Musters, WJ. Paulus, AC. van Rossum, LE. Deelman, O. Kamp. *Ultrasound and microbubble-targeted delivery of therapeutic compounds*. Netherlands Heart Journal. 2009;17:83-87.

LJM. Juffermans*, BDM. Meijering*, A. van Wamel, RH. Henning, IS. Zuhorn, M. Emmer, AMG. Versteilen, W. Paulus, WH. van Gilst, K. Kooiman, N. de Jong, RJP. Musters, LE. Deelman, O. Kamp. *Contributed equally. *Ultrasound and microbubble-targeted delivery of macromolecules is regulated by induction of endocytosis and pore formation*. Circulation Research. In press.

PA. Dijkmans, J. van Dijk, **LJM. Juffermans**, RJP. Musters, Speeuwenberg, CA. Visser, O. Kamp. *Safety and feasibility of real-time adenosine myocardial contrast echocardiography with emphasis on induction of arrhythmias: a study in healthy volunteers and patients with stable coronary artery disease*. European Journal of Echocardiography. In press.

LJM. Juffermans, A. van Dijk, CAM. Jongenelen, B. Drukarch, A. Reijkerker, HE. De Vries, O. Kamp, RJP. Musters. *Ultrasound and microbubble-induced cellular and intercellular permeability changes in primary endothelial cells*. Ultrasound in Medicine and Biology. Provisionally accepted (invited first revision).

Abstracts

LJM. Juffermans, PA. Dijkmans, RJP. Musters, O. Kamp. *Intercellular production of reactive oxygen species during sonoporation by ultrasound and microbubbles*. European Symposium on Ultrasound Contrast Imaging, Rotterdam. 2004.

LJM. Juffermans, PA. Dijkmans, CA Visser, RJP. Musters, O. Kamp. *Ultrasound and microbubbles cause intracellular accumulation of reactive oxygen species, calcium ions and mitochondrial dysfunction during sonoporation*. Bubble conference, Chicago, USA. 2004.

LJM. Juffermans, PA. Dijkmans, CA Visser, RJP. Musters, O. Kamp. *Ultrasound contrast agents and the role of reactive oxygen species in sonoporation*. European Symposium on Ultrasound Contrast Imaging, Rotterdam. 2005.

LJM. Juffermans, PA. Dijkmans, RJP. Musters, O. Kamp. *Formation of reactive oxygen species in the presence of ultrasound-exposed microbubbles is related to transient permeabilization of cell membranes*. American Heart Association, Dallas USA. Circulation, Oct 2005;112:II-635.

LJM. Juffermans, PA. Dijkmans, RJP. Musters, O. Kamp. *Formation of reactive oxygen species in the presence of ultrasound-exposed microbubbles is related to transient permeabilization of cell membranes*. Euroecho, Florence, Italy. Eur J Echocardiography, Dec 2005; 6:Suppl I-S41.

LJM. Juffermans, PA. Dijkmans, RJP. Musters, CA. Visser, O. Kamp. *Ultrasound contrast agents induced Ca^{2+} influx cause a hyperpolarization of the cell membrane by activating BK_{Ca} channels*. Bubble conference, Chicago, USA. 2006.

BDM. Meijering, **LJM. Juffermans**, K. Kooiman, LE. Deelman, W. van Gilst, RJP. Musters, O. Kamp, CA. Visser, N. de Jong, A. van Wamel. *Unraveling the mechanisms of ultrasound microbubble targeted gene delivery*. European Symposium on Ultrasound Contrast Imaging, Rotterdam. 2007.

LJM. Juffermans, O. Kamp, CA. Visser, RJP. Musters. *Ultrasound exposed microbubbles cause local hyperpolarization of the cell membrane*. American Heart Association, Orlando USA. Circulation, Oct 2007;116:II-646.

LJM. Juffermans, O. Kamp, CA. Visser, RJP. Musters. *Ultrasound-exposed microbubbles provoke local hyperpolarization of the cell membrane*. Euroecho, Lisbon, Portugal. Eur J Euroecho, Dec 2007;

BDM. Meijering, **LJM. Juffermans**, K. Kooiman, LE. Deelman, W. van Gilst, RJP. Musters, O. Kamp, CA. Visser, N. de Jong, A. van Wamel. *Mechanisms of delivery of therapeutic compounds by ultrasound and microbubbles*. Euroecho, Lisbon, Portugal. Eur J Euroecho, Dec 2007;

LJM. Juffermans, BDM. Meijering, K. Kooiman, LE. Deelman, W. van Gilst, RJP. Musters, O. Kamp, CA. Visser, N. de Jong, A. van Wamel. *Mechanisms of delivery of therapeutic compounds by ultrasound and microbubbles*. European Symposium on Ultrasound Contrast Imaging, Rotterdam. 2008.

LJM. Juffermans, BDM. Meijering, K. Kooiman, LE. Deelman, W. van Gilst, A. van Wamel, N. de Jong, CA. Visser, RJP. Musters, O. Kamp. *Enhanced uptake of macromolecules by endothelial cells using ultrasound and microbubbles: mechanisms and bioeffects*. International Vascular Biology Meeting, Sydney, Australia. 2008.

LJM. Juffermans, BDM. Meijering, K. Kooiman, M. Emmer, A. van Wamel, RJP. Musters, RH. Henning, IS. Zuhorn, LE. Deelman, W. van Gilst, N. de Jong, O. Kamp. *Targeted delivery of macromolecules using ultrasound and microbubbles is regulated by induction of endocytosis and pore formation*. American Heart Association, New Orleans, USA. Circulation, Oct 2008;118:S-643.

Dankwoord

Curriculum Vitae

Lynda Juffermans werd op 11 oktober 1979 geboren te Sassenheim. In 1997 behaalde zij haar VWO diploma aan het Fioretti College te Lisse. In hetzelfde jaar startte zij met de studie Biologie aan de Vrije Universiteit te Amsterdam. Haar eerste onderzoeksstage heeft zij gelopen op de afdeling Klinische Chemie in het VU Medisch Centrum, Amsterdam. Haar tweede onderzoeksstage liep zij gedurende 5 maanden op Massey University, Palmerston North in Nieuw Zeeland. In mei 2003 behaalde zij haar doctoraalexamen. In augustus 2003 begon zij als assistent in opleiding aan de afdelingen Cardiologie en Fysiologie van het VU Medisch Centrum, onder de vleugel van het Interuniversitair Cardiologisch Instituut Nederland (ICIN). De resultaten van dit onderzoek staan in dit proefschrift beschreven. Per 1 januari 2009 is zij werkzaam als post-doc op het STW project, en zal zij haar onderzoek met bubbels voortzetten aan het VU Medisch Centrum.

