Genetics and epigenetics of repeat derepression in human disease

Thijssen, P.E.

Curriculum Vitae

Peter Thijssen was born on December 6th 1983 in Zoetermeer, The Netherlands. He successfully completed pre-university education (VWO) at Het Alfrink College in Zoetermeer in 2002 with a focus on Science and Technology (natuur en techniek) supplemented with biology and economics. In September 2002, he started studying Life, Science & Technology at the University of Leiden and the Delft University of Technology. To finish his Bachelor's programme he did an internship at the department of Nephrology of the Leiden University Medical Center (LUMC), focusing on the role of C1q on the inflammation status of macrophages, under supervision of Dr. Wei Xu and Prof. Dr. Cees van Kooten. After graduating in February 2006, he enrolled in the master's programme of the Biomedical Sciences programme at Leiden university. During his master's programme, his first internship focused on the effect of D4Z4 repeat length on *FRG1* expression and was supervised by Dr. Yvonne Krom and Prof. Dr. Ir. Silvère van der Maarel at the department of Human Genetics of the LUMC. His second and final internship was conducted at TNO Quality of Life, Leiden, under supervision of Ing. Margreet de Vries and Prof. Dr. Paul Quax, and focused on the role of epigenetic dysregulation during vascular restenosis. He received his master's degree with honors (cum laude) in August 2008. In september 2008 he started working as a Ph.D. student at the departments of Human Genetics and Molecular Epidemiology of the LUMC, under supervision of Prof. Dr. Ir. Silvère van der Maarel and Prof. Dr. P. Eline Slagboom. Since January 2013 he has been working as a post-doctoral researcher at the department of Human Genetics of the LUMC under supervision of Dr. Haico van Attikum and Prof. Dr. Ir. Silvère van der Maarel.

List of Publications

Discussed in this thesis:

Increased DUX4 expression during muscle differentiation correlates with decreased SMCHD1 protein levels at D4Z4.
Balog J[#], **Thijssen PE**[#], Shadle S[#], Straasheijm KR, Van Der Vliet PJ, Krom YD, Van Den Boogaard ML, De Jong A, Lemmers RJ, Tawil R, Tapscott SJ, Van Der Maarel SM.
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Mutations in CDCA7 and HELLS cause immunodeficiency–centromeric instability–facial anomalies syndrome.
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Nature Communications 2015 Jul

DUX4 promotes transcription of FRG2 by directly activating its promoter in Facioscapulohumeral muscular dystrophy.
Thijssen PE, Balog J, Yao Z, Pham TP, Tawil R, Tapscott SJ, Van der Maarel SM.
Skeletal Muscle 2014 Oct

Chromatin remodeling of human subtelomeres and TERRA promoters upon cellular senescence: commonalities and differences between chromosomes.
Thijssen PE, Tobi EW, Balog J, Schouten SG, Kremer D, El Bouazzaoui F, Henneman P, Putter H, Eline Slagboom P, Heijmans BT, van der Maarel SM.
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Intrinsic epigenetic regulation of the D4Z4 macrosatellite repeat in a transgenic mouse model for FSHD.
Krom YD[#], **Thijssen PE**[#], Young JM, den Hamer B, Balog J, Yao Z, Maves L, Snider L, Knopp P, Zammit PS, Rijkers T, van Engelen BG, Padberg GW, Frants RR, Tawil R, Tapscott SJ, van der Maarel SM.
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#: authors contributed equally

Publications as co-author:

The de-ubiquitylating enzymes USP26 and USP37 regulate homologous recombination by counteracting RAP80.
Typas D, Luijsterburg MS, Wiegant WW, Diakatou M, Helfricht A, **Thijssen PE**, van de Broek B, Mullenders LH, van Attikum H.
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Leukocyte telomere length associates with prospective mortality independent of immune-related parameters and known genetic markers.
Deelen J, Beekman M, Codd V, Trompet S, Broer L, Hägg S, Fischer K, **Thijssen PE**, Suchiman HE, Postmus I, Uitterlinden AG, Hofman A, de Craen AJ, Metspalu A, Pedersen NL, van Duijn CM, Jukema JW, Houwing-Duistermaat JJ, Samani NJ, Slagboom PE.
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Huijbers MG, Zhang W, Klooster R, Niks EH, Friese MB, Straasheijm KR, **Thijssen PE**, Vrolijk H, Plomp JJ, Vogels P, Losen M, Van der Maarel SM, Burden SJ, Verschuuren JJ.
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Heterogeneous clinical presentation in ICF syndrome: correlation with underlying gene defects.
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Also see: http://goo.gl/D7gnJj or scan the QR-code below