

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/37577> holds various files of this Leiden University dissertation

Author: Jansen, Steffy

Title: Pituitary hormone secretion in familial longevity : The Switchbox Study

Issue Date: 2016-02-03

ISBN

978-94-028-0020-3

Design/lay-out

Promotie In Zicht, Arnhem

Print

Ipskamp Drukkers, Enschede

© W.M. Jansen, The Netherlands 2016

Copyright of each chapter is with the publisher of the journal in which the work has been published.
No part of this thesis may be reproduced, stored in a retrieval system or transmitted in any form or by any
means, without permission of the author or, when appropriate, of the publisher of the individual chapters.

The work described in this thesis was supported by the European Commission project Switchbox
(FP7, Health-F2-2010-259772).

PITUITARY HORMONE SECRETION IN FAMILIAL LONGEVITY

THE SWITCHBOX STUDY

Proefschrift

ter verkrijging van de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof. mr. C.J.J.M. Stolker,
volgens besluit van het College voor Promoties
te verdedigen op woensdag 3 februari 2016 klokke 15.00 uur

door

Wilhelmina Maria Jansen
geboren te `s-Hertogenbosch
in 1986

Promotoren

Prof. Dr. R.G.J. Westendorp

Prof. Dr. H. Pijl

Co-promotor

Mw. Dr. Ir. D. van Heemst

Leden promotiecommissie

Mw. Prof. Dr. J. H. Meijer

Mw. Prof. Dr. B. A. Demeneix (UMR 7221 CNRS / MNHN Evolution des Régulations Endocrinien, département Régulations, Développement et Diversité Moléculaire, Muséum National d'Histoire Naturelle, Paris, France)

Prof. Dr. E. R. de Kloet (Academic Center of Drug Research, Leiden, The Netherlands)

Voor mijn ouders.

CONTENTS

Chapter 1	General introduction and outline of the thesis	11
Part I Switchbox Leiden: study design and data collection		21
Chapter 2	Switchbox Leiden: study design and data collection	23
Jansen SW*, Akintola AA*, Oei NY, Pijl H, Roelfsema F, Westendorp RG, van der Grond J, van Heemst D. on behalf of the Switchbox study		
Chapter 3	A Simple and Versatile Method for frequent 24 h Blood Sample Collection in Healthy Older Adults	33
Akintola AA*, Jansen SW*, Wilde RBP, Hultzer G, Rodenburg R, van Heemst D. MethodsX. 2015; 2: 33-38. doi:10.1016/j.mex.2014.12.003.		
Part II Hypothalamic-pituitary-thyroid axis and longevity		45
Chapter 4	Human Longevity is Characterised by High Thyroid Stimulating Hormone Secretion without Altered Energy Metabolism	47
Jansen SW*, Akintola AA*, Roelfsema F, van der Spoel E, Cobbaert CM, Ballieux BE, Egri P, Kvarta-Papp Z, Gereben B, Fekete C, Slagboom PE, van der Grond J, Demeneix BA, Pijl H, Westendorp RG, van Heemst D. Scientific Reports. 2015; 5. doi: 10.1038/srep11525.		
Chapter 5	Familial Longevity is Associated with Higher TSH secretion and Strong TSH-fT3 Relationship	69
Jansen SW, Roelfsema F, van der Spoel E, Akintola AA, Postmus I, Ballieux B, Slagboom PE, Cobbaert C, van der Grond J, Westendorp RG, Pijl H, van Heemst D. J Clin Endocrinol Metab. 2015 Oct;100(10):3806-13. doi: 10.1210/jc.2015-2624.		
Part III Hypothalamic-pituitary-adrenal axis and longevity		87
Chapter 6	Familial Longevity is Marked by Lower Diurnal Salivary Cortisol Levels: the Leiden Longevity Study	89
Noordam R, Jansen SW*, Akintola AA*, Oei NY, Maier AB, Pijl H, Slagboom PE, Westendorp RG, van der Grond J, de Craen AJ, van Heemst D. PLoS One. 2012;7(2):e31166. doi: 10.1371.		
Chapter 7	Characterization of the Hypothalamic-Pituitary-Adrenal-Axis in Familial Longevity under Resting Conditions	105
Jansen SW, Roelfsema F, Akintola AA, Oei NY, Cobbaert CM, Ballieux PB, van der Grond J, Westendorp RG, Pijl H, van Heemst D. PLoS One. 2015; 10(7): e0133119. doi: 10.1371		

Chapter 8	Physiological Responding to Stress in Middle-Aged Males Enriched for Longevity: A Social Stress Study	127
	Jansen SW, van Heemst D, van der Grond J, Westendorp RG, Oei NY. Stress. 2015 Nov 9:1-9. doi:10.3109	
Chapter 9	General discussion	147
	Nederlandse samenvatting	159
	List of publications	171
	Curriculum Vitae	177
	Dankwoord	181

