Cellular stress *in vitro* and longevity *in vivo*

Pim Dekker

Financial support for the publication of this thesis by the Nederlandse Vereniging voor Gerontologie (Dutch Society for Gerontology) and by Unilever PLC is gratefully acknowledged.

ISBN: 978-94-6182-063-1

This research was funded by the Netherlands Genomics Initiative (NCHA 050-060-810), the Innovation Oriented research Program on Genomics (SenterNovem; IGE01014 and IGE5007), the Netherlands Genomics Initiative/Netherlands Organization for scientific research (NGI/NWO; 05040202 and 050-060-810), EU funded Network of Excellence Lifespan (FP6 036894) and Unilever PLC.

Cover design and layout: Gijs Grob
With courtesy of AMPELMANN GmbH. The design company specializes in emotional lifestyle products with high utility value. More information under: www.ampelmann.de
Printed by: Off Page, Amsterdam

Cellular stress *in vitro* and longevity *in vivo*

Proefschrift

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof. mr. P.F. van der Heijden,
volgens besluit van het College voor Promoties
te verdedigen op dinsdag 28 februari 2012
klokke 16.15 uur

door

Pim Dekker
geboren te Rotterdam
in 1973

Promotie commissie

Promotores:	Prof. Dr. R.G.J. Westendorp
	Prof. Dr. H.J. Tanke
Co-promotores:	Dr. A.B. Maier
	Dr. D. van Heemst
Referenten:	Prof. Dr. P.D. Adams (Glasgow University, UK)
	Prof. Dr. P.E. Slagboom
	Prof. Dr. A.M. Deelder

A very popular error:
having the courage of one's convictions;
rather it is a matter of having the courage
for an attack on one's convictions

F. Nietzsche

Contents