



## UvA-DARE (Digital Academic Repository)

### Adult hippocampal cell birth and death in relation to stress, aging and the vasculature

Heine, V.M.

**Publication date**  
2004

[Link to publication](#)

#### **Citation for published version (APA):**

Heine, V. M. (2004). *Adult hippocampal cell birth and death in relation to stress, aging and the vasculature*. [Thesis, fully internal, Universiteit van Amsterdam].

#### **General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

#### **Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

# Contents

<b>Chapter 1</b>	General Introduction	p9
<b>Chapter 2</b>	part I: Suppressed proliferation and apoptotic changes in the rat dentate gyrus after acute and chronic stress are reversible. <i>(EJN 2004 9(1):131-44)</i>	p35
<b>Chapter 3</b>	Prominent decline of newborn cell proliferation, differentiation, and apoptosis in the aging dentate gyrus, in absence of an age-related hypothalamus-pituitary-adrenal axis activation. <i>(NBA 2004 25(3):361-75)</i>	p59
<b>Chapter 4</b>	part II: Increased p27Kip1 protein expression in the dentate gyrus of chronically stressed rats indicates G1 arrest involvement. <i>(Neuroscience, in press)</i>	p83
<b>Chapter 5</b>	Chronic stress reduces vascular-associated adult proliferation and VEGF and Flk-1 protein expression in the rat dentate gyrus. <i>(submitted)</i>	p97
<b>Chapter 6</b>	Age-related changes in the vascular-associated population of actively cycling cells in the rat dentate gyrus. <i>(submitted)</i>	p115
<b>Chapter 7</b>	Summary - General Discussion	p133
<b>Appendix</b>	Color Illustrations	p164
	Nederlandse Samenvatting	p178
	References	p182
<b>Addendum</b>	Gene expression patterns in rat dentate granule cells: comparison between fresh and fixed tissue. <i>(JNM 2003 131(1-2):205-11)</i>	p215
	Dankwoord	p230
	Curriculum Vitae	p233
	Publications	p234

