

Contents

VII Preface

Pahernik, S. (Heidelberg)

1 Introduction

Rudolph, K.L. (Ulm)

Chapter 1

2 Speakers at the Symposium

Morita, M. (Ulm)

Chapter 2

18 Aging of the Niche and the Microenvironment and Its Role in Stem Cell Aging

Geiger, H. (Ulm)

Chapter 3

27 Hematopoietic Stem Cell Aging and Cancer

Chen, Y.; Ju, Z. (Hangzhou)

Chapter 4

36 DNA Damage, Checkpoint Responses, and Cell Cycle Control in Aging Stem Cells

Kleinhans, K.N.; Burkhalter, M.D. (Ulm)

Chapter 5

48 Hematopoietic Stem Cell Aging and Fate Decision

Illing, A.; Morita, Y. (Ulm)

Chapter 6

- 74 Stem Cell Therapy and Stress Response in Pancreas and Intestine**
Sperka, T.; Omrani, O. (Ulm)

Chapter 7

- 87 Niche-Stem Cell Interactions and Environmental Influences**
Tang, D. (Ulm)

Chapter 8

- 92 Stem Cells and Metabolism**
Missios, P.; Guachalla, L. (Ulm)

Chapter 9

- 100 Molecular Mechanisms of Muscle Stem Cell Aging**
Baig, A.H.; Tümpel, S. (Ulm)

Chapter 10

- 112 Neural Stem Cells in Development and Aging**
Schmidt-Straßburger, U. (Ulm)

121 Author Index

122 Subject Index