An Introduction to Gerontology

With the world’s population getting increasingly older, there has never been a more pressing need for the study of old age and ageing. *An Introduction to Gerontology* provides a wide-ranging introduction to this important topic. By assuming no prior expert knowledge and avoiding jargon, this book will guide students through all the main subjects in gerontology, covering both traditional areas, such as biological and social ageing, and more contemporary areas, such as technology, the arts and sexuality. *An Introduction to Gerontology* is written by a team of international authors with multidisciplinary backgrounds who draw evidence from a variety of different traditions.

**Ian Stuart-Hamilton** is Professor of Developmental Psychology and Faculty Head of Research and External Activity at the University of Glamorgan. He has been teaching lifespan psychology for over twenty-five years and has written six textbooks including *The Psychology of Ageing*, which was the winner of an award from the British Medical Association and shortlisted for the British Psychological Society’s Book of the Year award.
AN INTRODUCTION TO

Gerontology

Edited by
Ian Stuart-Hamilton
<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of figures</td>
</tr>
<tr>
<td>List of tables</td>
</tr>
<tr>
<td>List of contributors</td>
</tr>
<tr>
<td>1 Introduction</td>
</tr>
<tr>
<td>Ian Stuart-Hamilton</td>
</tr>
<tr>
<td>2 The biology of ageing: a primer</td>
</tr>
<tr>
<td>João Pedro de Magalhães</td>
</tr>
<tr>
<td>3 Fostering resilience, promoting health and preventing disease in older adults</td>
</tr>
<tr>
<td>Sharon Ostwald and Carmel Dyer</td>
</tr>
<tr>
<td>4 Ageing and health: managing co-morbidities and functional disability in older people</td>
</tr>
<tr>
<td>Carmel Dyer and Sharon Ostwald</td>
</tr>
<tr>
<td>5 Social care and older people</td>
</tr>
<tr>
<td>Raymond Ngan</td>
</tr>
<tr>
<td>6 Cognitive processes and ageing</td>
</tr>
<tr>
<td>Paul Verhaeghen</td>
</tr>
<tr>
<td>7 The psychology of atypical ageing</td>
</tr>
<tr>
<td>Bob Woods</td>
</tr>
<tr>
<td>8 Sociological perspectives on ageing</td>
</tr>
<tr>
<td>Kate Davidson</td>
</tr>
</tbody>
</table>
## Contents

9  **Retirement**  
   Lynn McDonald  
   251

10  **Sexuality and ageing**  
    Rebecca Flyckt and Sheryl A. Kingsberg  
    283

11  **Policies on ageing**  
    Suzanne Wait  
    317

12  **Cross-cultural differences in ageing**  
    Sandra Torres  
    340

13  **Technology and ageing**  
    Anthea Tinker  
    363

14  **Literary portrayals of ageing**  
    Diana Wallace  
    389

15  **Palliative care for older adults**  
    Lynn O’Neill and Sean Morrison  
    416

16  **Conclusions**  
    Ian Stuart-Hamilton  
    430

Index  
438
Figures

2.1 Prevalence of selected chronic conditions as a function of age. Values are expressed in percentage for the US population (2002–03 data set).

2.2 Mortality rates as a function of age. Values are expressed in deaths per 100,000 people, plotted on a logarithmic scale, for the 2002 US population.

3.1 Projections of disabled population aged 65+ years based on actual disability figures for 1982–96 in the USA.

3.2 Prevalence of risk factors and health behaviours varies by disability status among older adults aged 65 or older.

3.3 Determinants of active ageing.

3.4 Percentage of adults 60 years of age and over meeting the dietary recommendations for the Healthy Eating Index components: USA, 1999–2002.

3.5 Force-field analysis of restraining and driving factors that influence an older spousal caregiver's decision to engage in health-promoting behaviours.

5.1 Differences between the formal and informal care sectors.

5.2 Types of informal social support.

5.3 The caring dilemma.

5.4 A tiered model of service provision.

5.5 Social health and social capital.

5.6 The Personal Wellbeing Index (PWI) and subjective well-being.

5.7 Personal Wellbeing Index: all domains must contribute unique variance.

5.8 Pathways of interweaving formal and informal care.

6.1 Distribution of autobiographical memories over the lifespan.

6.2 Longitudinal changes in volume in the frontal cortex.

8.1 Life expectancy from birth 1986–2008, UK.

10.1 Cross-section of the penis.

13.1 Gerontechnology impact matrix.
## Tables

1.1 Life expectancy of individuals born in 1400, 1841, 1981 and 2009 in the UK  

2.1 Diversity of mammalian life histories obtained from the AnAge database  

2.2 Genes associated with ageing and/or longevity per model organism  

3.1 Recommendations for screening and preventive care based on functional level and life expectancy  

3.2 Recommendations for food-based dietary guidelines that recognize the interactions between food and health within a social and cultural context  

4.1 Overview of the comprehensive geriatric assessment  

4.2 Selected depression-screening approaches  

4.3 Triggers for IADL  

4.4 Types of dementia  

4.5 Methods of treatment for dementia-associated behavioural problems  

4.6 Forensic markers  

8.1 Population projections by legal marital status 2007–31 (percentages)  

10.1 Changes in female sexual physiology with ageing  

10.2 Medical conditions known to be related to sexual dysfunction  

10.3 Medications known to have sexual side effects  

11.1 Objectives arising from the recommendations for action from the Madrid International Plan of Action on Ageing, 2002  

13.1 Percentage of total population aged 60 and over in 2006 and projections for 2050  

13.2 Percentage of population aged 80 and over as a percentage of all aged 60 and over in 2006 and projections for 2050
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3</td>
<td>Potential support ratio in 2006 and projections for 2050</td>
<td>369</td>
</tr>
<tr>
<td>13.4</td>
<td>Where people aged 65 and over live</td>
<td>375</td>
</tr>
<tr>
<td>13.5</td>
<td>Percentages of people aged 65 and over unable to manage certain tasks</td>
<td>379</td>
</tr>
<tr>
<td></td>
<td>without help, 1998–9</td>
<td></td>
</tr>
<tr>
<td>15.1</td>
<td>Tenets of palliative care</td>
<td>418</td>
</tr>
</tbody>
</table>
Contributors

Kate Davidson, University of Surrey
Carmel Dyer, University of Texas at Houston
Rebecca Flyckt, University Hospitals of Cleveland, Case Medical Center; MacDonald Women’s Hospital, Cleveland
Sheryl A. Kingsberg, University Hospitals of Cleveland, Case Medical Center; MacDonald Women’s Hospital, Cleveland
João Pedro de Magalhães, University of Liverpool
Lynn McDonald, University of Toronto
Sean Morrison, Mount Sinai School of Medicine, New York
Raymond Ngan, City University of Hong Kong
Lynn O’Neill, Mount Sinai School of Medicine, New York
Sharon Ostwald, University of Texas at Houston
Ian Stuart-Hamilton, University of Glamorgan
Anthea Tinker, King’s College London
Sandra Torres, University of Uppsala
Paul Verhaeghen, Georgia Institute of Technology
Suzanne Wait, University College London
Diana Wallace, University of Glamorgan
Bob Woods, Bangor University