



# Vitality and Ageing

Ageing is the most important challenge of our society. Research should therefore be more focussed on the older individual and their medical care. Before that, lots of questions needs to be addressed: How do we age, how do we stay vital? How should we treat older individuals, are those decisions driven by evidence based medicine? Within this half minor, we will discuss these aspects of vitality and ageing with international experts and within interactive working groups.

## Introduction

Ageing can be described as “a progressive, generalized impairment of function, resulting in an increasing vulnerability to environmental challenge and a growing risk of disease and death”. Although the pathologies that accompany ageing are diverse and the rate at which it occurs differs widely between species, the universality of the ageing process suggests that common biological mechanisms may be at play. Many of the prevailing proximate theories of ageing centre on the hypothesis that the rate of ageing is determined by an intricate balance between damage accumulation



and defence and repair mechanisms. From this hypothesis, it follows that analysis of the mechanisms by which this balance is regulated may reveal the regulatory axes of the ageing process and allow the development of anti-ageing therapeutics.

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## Overview

This half minor focusses around three major biological ageing themes, namely “Damage and repair and ageing”, “Neuro-endocrine regulation of lifespan” and “Modulation of lifespan”. This course will focus as well on the biological aspects of vitality and healthy ageing. Attention will be paid to repair mechanisms, nutrition, longevity and maintenance of bodily functions and independence. Next to the extensive learning in biological

mechanisms, we would also address how is it to become older with help of personal experience and discussions with elderly persons, personal vitality, and training in academic skills, for example communication, giving and receiving feedback, creative thinking, team roles, writing and presenting.

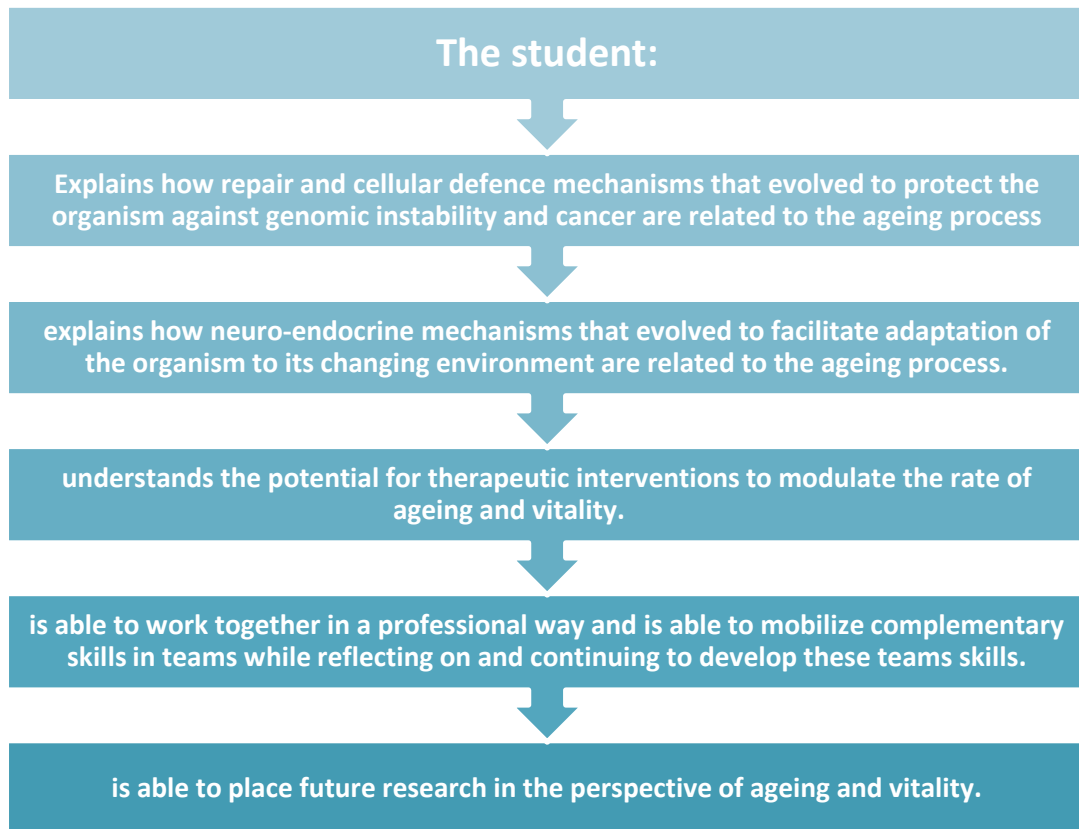
## Modulation of lifespan



Damage  
and repair  
and ageing

Neuro-  
endocrine  
regulation  
of lifespan

## Learning goals



## Assessment (tentative)

- Multiple short assignments (pass/fail)
- Written Exam (30% of final grade)
- Final report (50% of final grade)
- Final presentation (20% of final grad)



## Contact us



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