The goal of this thesis is to identify risk factors for disability, disease-free survival, mortality and longevity. It tries to answers to the following research questions:

- 1. What genetic loci are associated with longevity and time to death and disease?
- 2. Do body mass index, physical activity, and happiness influence time to death and time spent with disability?
- 3. Which set of risk factors best predicts death and how do different groups of risk factors compare in their predictive power?

In addition to answering the research questions, the methodological challenges will be described and the answers will be put in the context of individual and population ageing.

