# Abstract

The dissertation analyses and discusses a number of ethical issues that have been raised in connection with the development of synthetic biology. Synthetic biology is a set of new techniques for DNA-level design and construction of living beings with useful properties. The dissertation especially focuses on two aspects:

1. New biotechnologies are typically met by a set of objections that are simultaneously very common and very vague; e.g. that manipulating the genome is 'unnatural' or that it amounts to 'playing god'. I discuss how these objections are best understood, whether (or to what extent) popular *responses* to them succeed, and whether the objections are ultimately persuasive.

2. Given that synthetic biology is a *new* technology, there is a certain degree of uncertainty about its ultimate effects, and many perceive the technology as risky. I discuss two common approaches in risk regulation, namely the precautionary principle and cost-benefit analysis. I argue that the precautionary principle is more reasonable than it is frequently given credit for, and that cost-benefit analysis cannot be defended as the uniquely rational decision procedure.