

Human Practice Report
Paris Bettencourt 2012 iGEM Team

Introductionp5

I Debate on synthetic biology as a techniquep6

A. Historical background: Synthetic biology as an extension to Genetic Engineering p6

1. Definitions: synthetic biology and genetic engineering

- i. Synthetic biology
- iii. Comparison between Synthetic Biology and Genetic engineering

2. SB and Genetic engineering share a common history and so common controversies around the recombinant DNA technology.

- i. Beginnings
- ii. Asilomar
- iii. What happened next
- iv. Analysis

B. Concerns raised by Synthetic Biologyp11

1. Recombinant DNA technology

2. Synthetic Biology: Awareness, perceptions, concerns and regulation

- i. Awareness of synthetic biology
- ii. Perception of Synthetic Biology
- iii. Concerns about Synthetic Biology
- iv. Approval of synthetic biology
- v. Who should regulate synthetic biology and what should be taken into accounts

when making guidelines and laws?

3. Analysis of the concerns raised by synthetic biology

- i. Unnaturalness
- ii. Playing God
- iii. Status of artificial life
- iv. Physical harms
- v. Regulations

4. Will rising awareness change anything?

- i. Polls have shown that skepticism is not simply caused by lack of information
- ii. We disagree with the finality of educating on new technologies so the population can accept them better

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