

Workshop *Biotechnology*

ROTA 2012 Brugge

We live in an era where the 'makeable human' is within reach. Gene therapy will become a standard technique for curing genetic diseases (e.g. cystic fibrosis, hemophilia, ...). The current difficulties in human cloning will also be resolved in the near future. Time to think about the possibilities, but also the ethic objections. In addition this workshop will use photo editing software to produce human-animal hybrid images.



The **Vacanti mouse** was a laboratory mouse that had what looked like a human ear grown on its back. The "ear" was actually an ear-shaped cartilage structure grown by seeding cow cartilage cells into a biodegradable ear-shaped mold. The earmouse, as it became known as, was created by Dr. Charles Vacanti, at the University of Massachusetts in 1995. Created to demonstrate a method of fabricating cartilage structures for transplantation into human patients, a resorbable polyester fabric was infiltrated with bovine cartilage cells and implanted under the skin of a hairless mouse. The mouse itself was a commonly used strain of immunocompromised mouse, preventing a transplant rejection.

What do we do?



Day 1

- Introduction
- Extract your own DNA from cheek cells

Day 2

- Genetic engineering : introduce a gene from a bioluminescent jellyfish in bacteria
- Discussion on biotechnology and ethics

Day 3

- Photographing of the team members and combining them with animal parts by photo editing in GIMP or Photoshop

Day 4

- More photo editing
- Preparing for presentation



Larry Dunstan



The Kabuto project



Pullpoblank by
Gabriel Schkolnick



Kimiko Yoshida

Who do we need? Twelve teammates.

- Scientists
- Creative minds
- Photo editors