

How to construct a UFO

~ To ready for medical study ~

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Outline of the lecture

全球視野與溝通 course is setup with an aim to foster personal growth and global competency in terms of improving communication skills, understanding different cultures and knowing various global medical-related issues. Coordinator is Prof. Antonio Cheung, and fresh undergraduate medical students take the course. My lecture "How to construct a UFO" is a part of it. Through my lecture, the students will increase their interest in learning human biology, and facilitate critical thinking and inter-discipline learning, even improve English communication and presentation skills.

Lecture objective

To ready for medical study as medical student

Lecture schedule

1st week (2hr)

- To learn forward approach

2nd week (2hr)

- To learn reverse approach

3rd week (2hr)

- Presentation for reverse engineering
- To summarize the approaches for medial study

Forward approach

In class activity

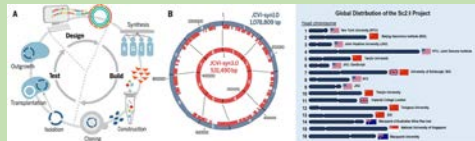
PDCA cycle



Anticipated technology for UFO



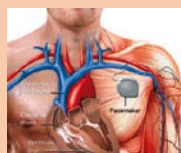
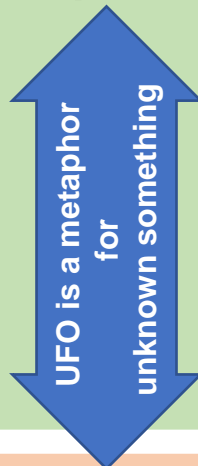
Genome hack



Clinical research

- Drug development
- Clinical trial
- Artificial medical support etc

UFO



Organism

Reverse approach

In class activity

Anatomy of computer



Reverse engineering

Observation to understand



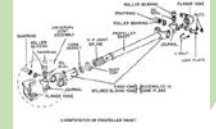
Name = function



Choose a proper tool



Redesign blueprint



Basic research

- Anatomy
- Cellular biology
- Molecular biology
- Structural biology

Take home message for students

- Multiple approach is required for medical study.
- Your imagination creates a new future.
- Highly observant and insight are required to understand unknown something.

Current problems

- Currently 12 computers to be disassemble is required per year.
- Since disassembled PC can be discarded once in a year through university system, I' m storing 12 disassembled PC in my laboratory.
- I personally provide the tools for reverse assembling.