Do you want a boy or a girl?

1

Medical Procedure: How to choose the gender of your child?

… In Vitro Fertilization (IVF)
体外受精

Vitro = Glass

In "Glass" Fertilization

In "Glass" Petri Dish

2

IVF: History

First IVF 1978...

Louise Brown
In England

2013…

Louise Brown +
her own baby

3

IVF in Media: "Test Tube Baby"

diagram for PowerPoint

photo

petri dish

4

2021 Statistics

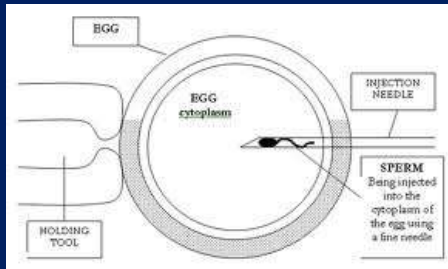60,381 IVF births
(~ 7.4%)

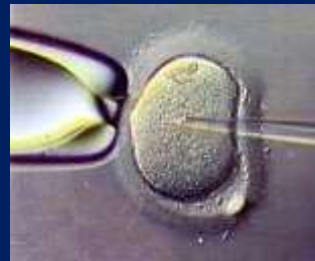97,128 IVF births
(~2.3%)

Critical Thinking Question:
Why is Japan 300% higher than US

5

IVF: How is it done?

Microscopic Diagram 顕微鏡の図

Microscopic Image 顕微鏡の写真

6

Where does the sperm come from?

- the husband
- a deceased husband
- sperm donor
- deceased sperm donor

sperm 精子

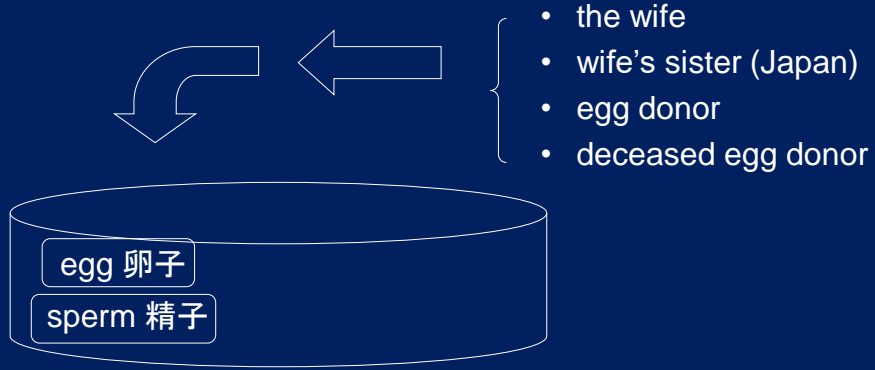glass petri dish
in vitro

7

Where can the sperm come from?

- the husband
- a deceased husband
- sperm donor
- deceased sperm donor

sperm 精子

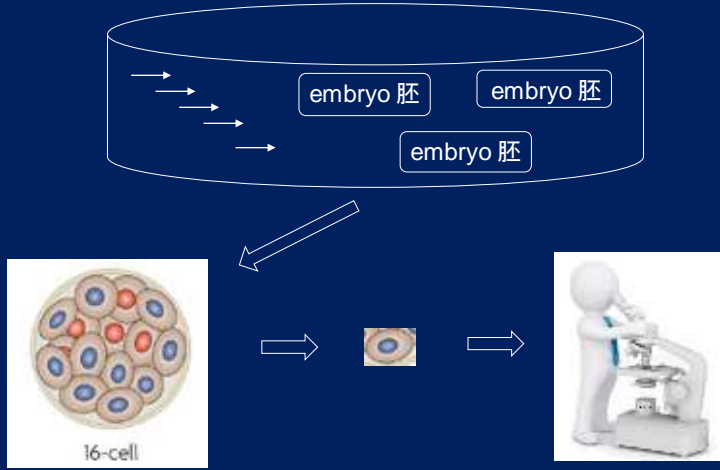glass petri dish
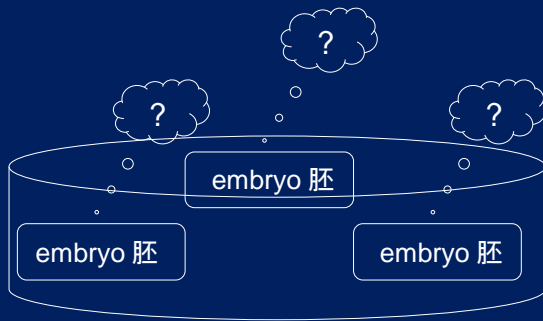*in vitro*

8

Where can the egg come from?

- the wife
- wife's sister (Japan)
- egg donor
- deceased egg donor

egg 卵子
sperm 精子

9

How many?

sperm | sperm | sperm
egg | egg | egg

embryo 胚 | embryo 胚 | embryo 胚
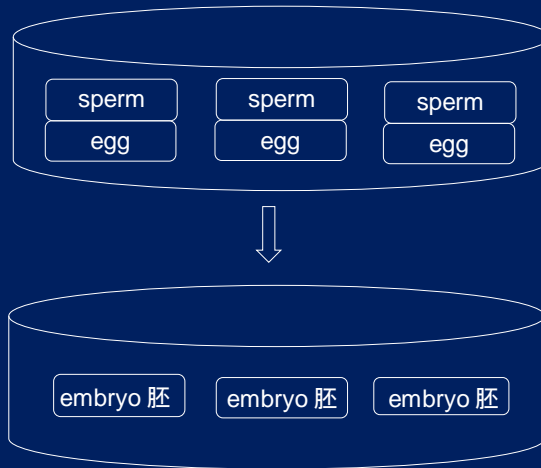
10

Embryo Grows

After 5 days: examine embryo ..

embryo 胚   embryo 胚

embryo 胚

16-cell

11

What can we tell about the embryo 胚...

? ? ?

embryo 胚

embryo 胚   embryo 胚

we can learn…
-many diseases
-sex of child
-genetics
    divorce gene
    Alzheimer's gene
-in the future ？？
    eye color?
    IQ?
    athletic ability?
    musical talent?

PGD = Pre-implantation Genetic Diagnosis
= 体外受精した胚の遺伝的診断

12

Result: Choose the Gender of Your Future Child

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