



順天堂

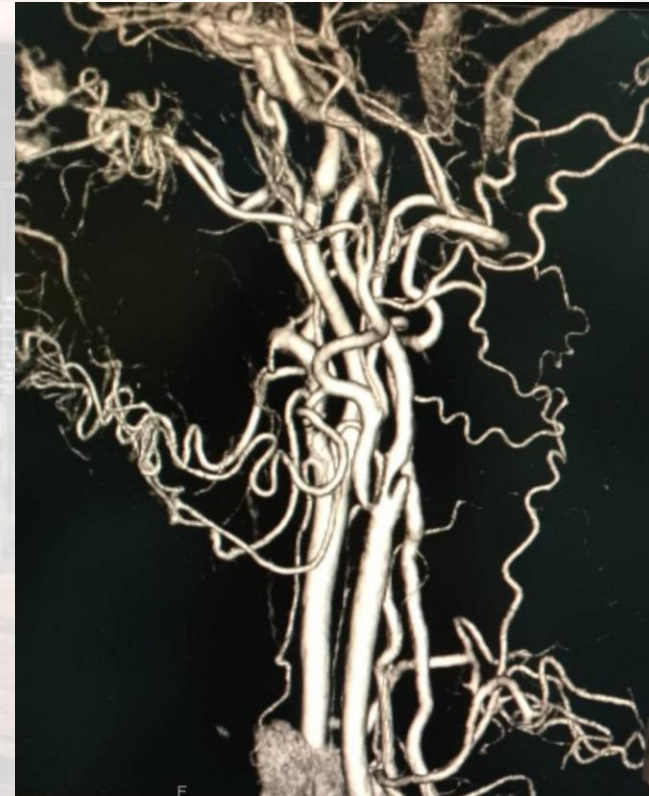
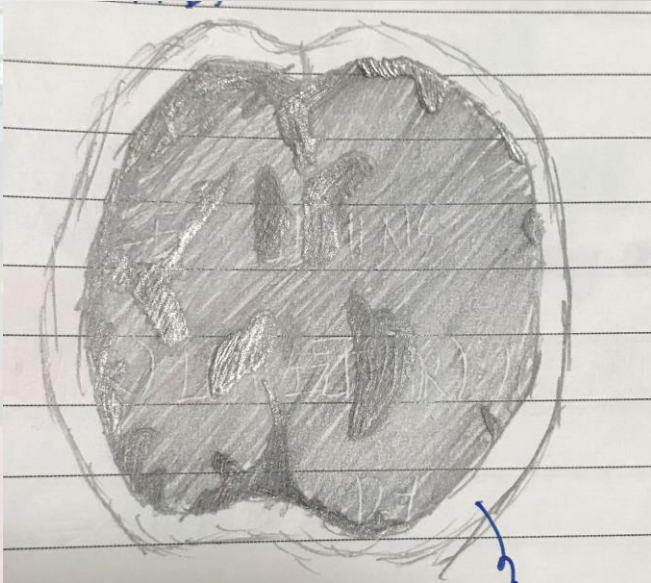
# Intern exchange student in JUNTENDO UNIVERSITY

## Student

- 1.Hsu chia-chi
- 2.Huang Yu-Han
- 3.Tien Hsiu -Ru

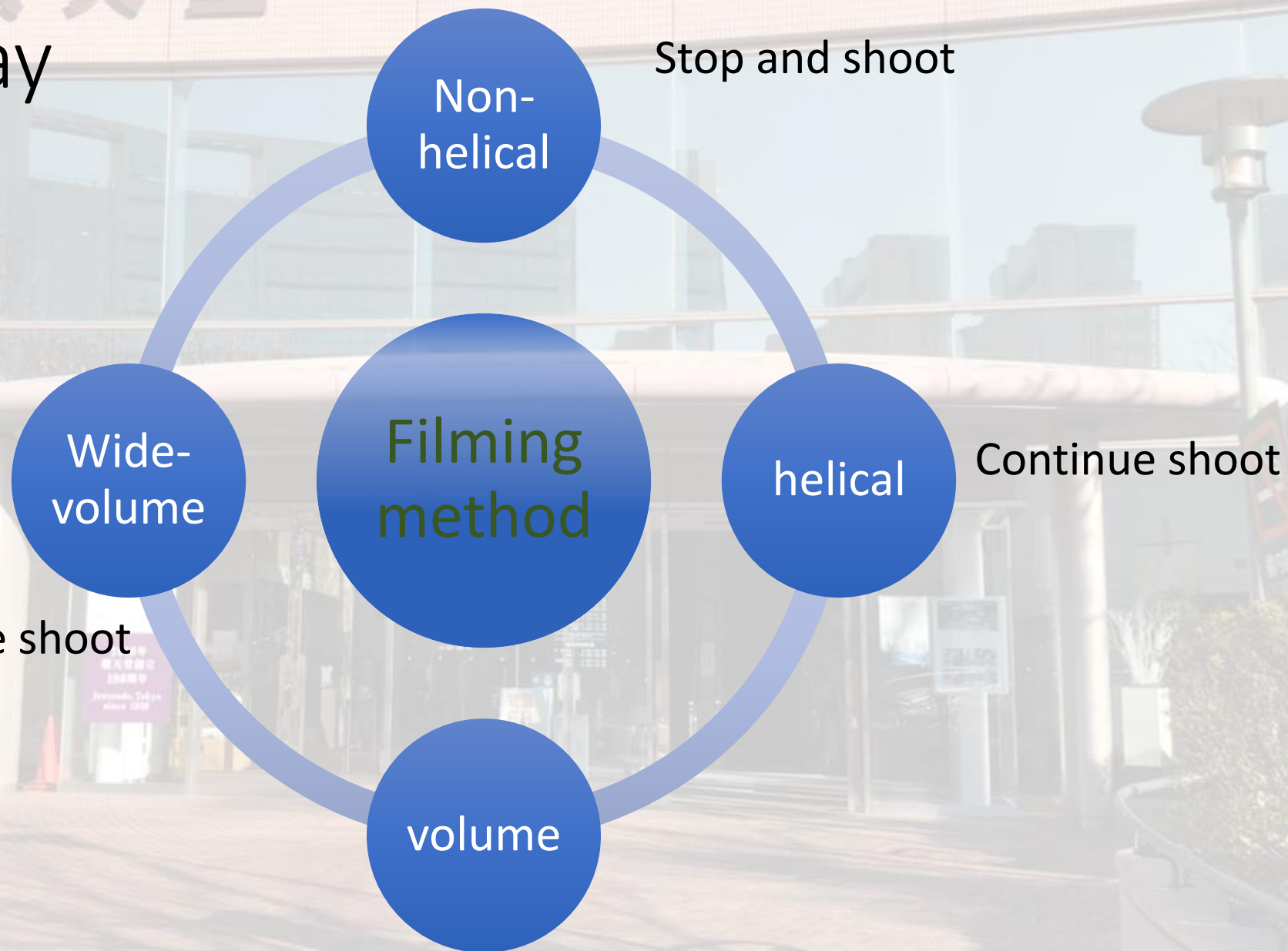
# CT. second day

- we learned about how to operation from 3D imaging that was difficult for us because we didn't have touch before this program so is the first time we made the imagine by ourselves. We do the same step with teacher but we still can not make the beautiful imaging .and saw the dissection form head.





CT 3rd day



# Between non-helical and helical

## Non-helical

- Signal prescribed dose of medicine **high**
- Area. **small**
- To penetrate **no**

## helical

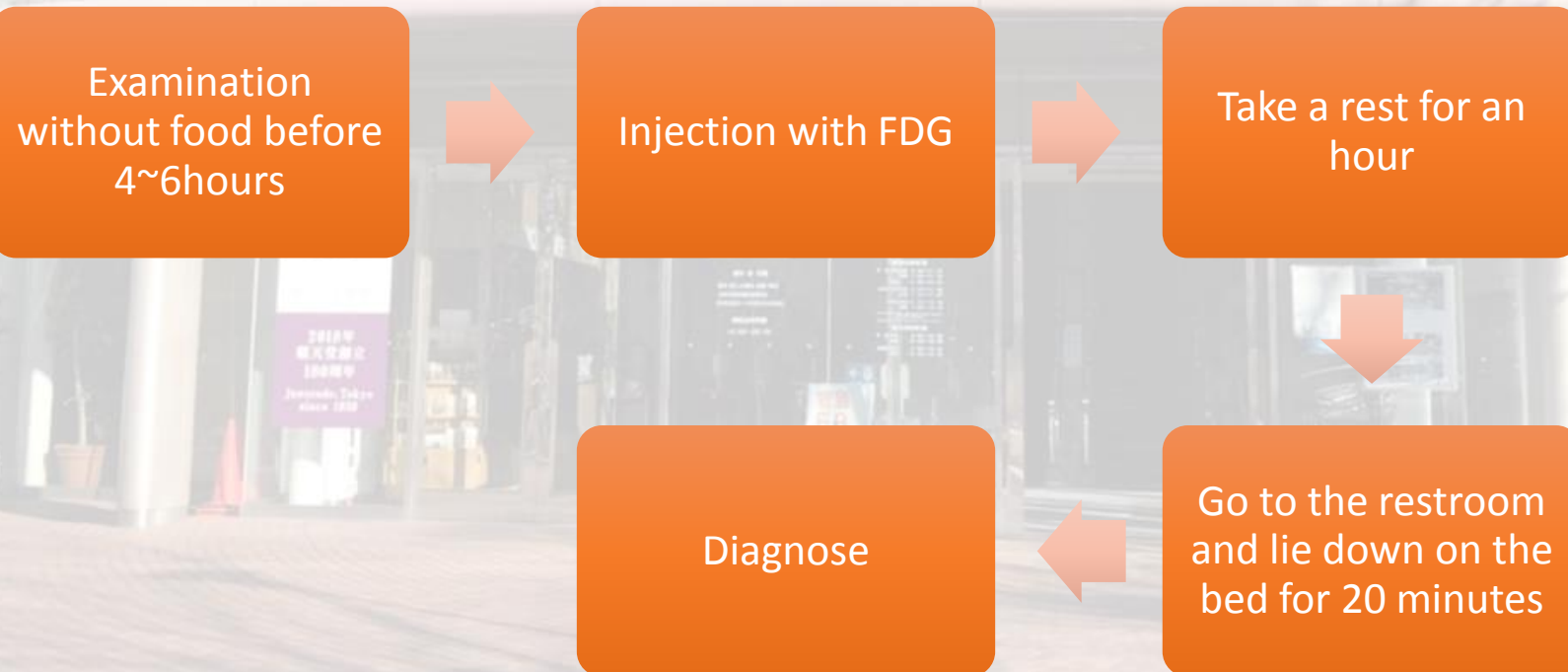
- Signal prescribed dose of medicine. **low**
- Area. **large**
- To penetrate **yes**



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# PET/CT

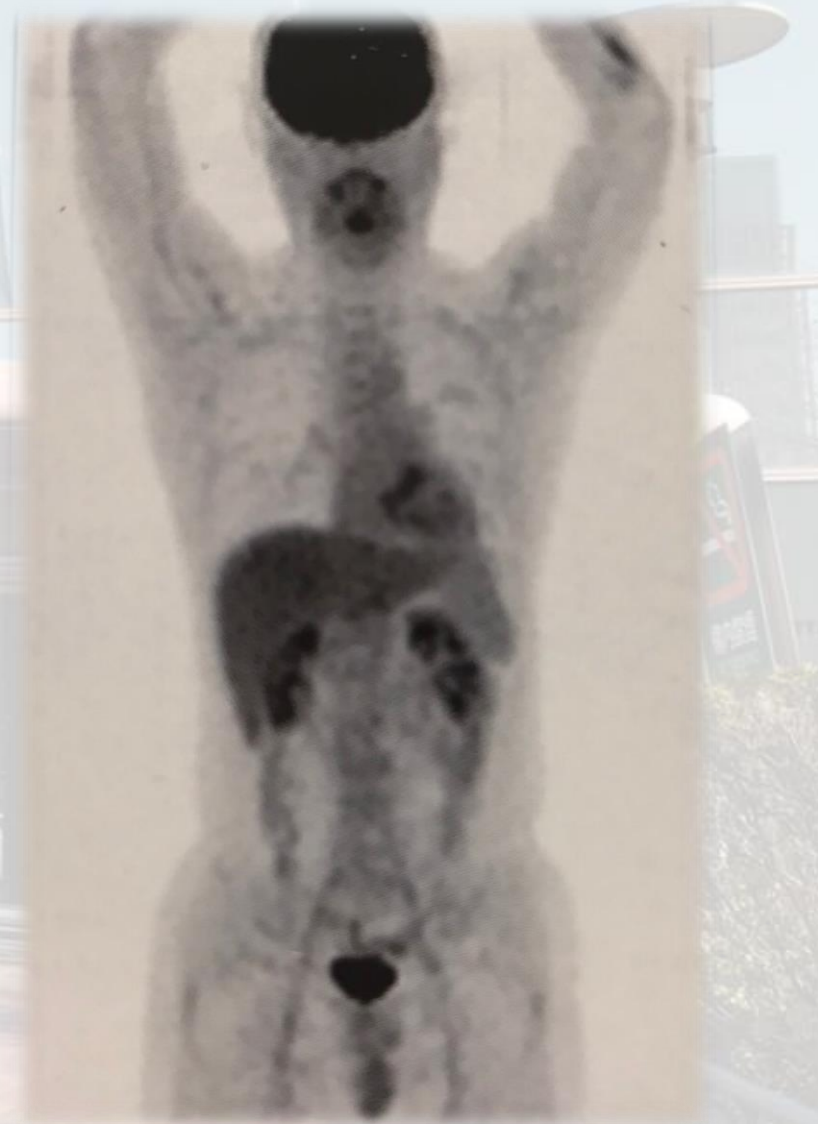
## • Diagnostic process 診斷過程





# PET/CT examination principle 検査原則

PET examination uses the property that "malignant tumor cells have more glucose than normal cells and a very small amount of radioactive substance (radioisotope) called fluorine-18 (F18) is added to the subject. After the glucose imaging agent (referred to as FDG) the malignant tumor cells will take more FDG than the normal cells and the PET imaging device will capture the release from FDG



# 一般攝影

We follow the teacher to the ward and watch how to examination with mobile art evolution after imaging we need to check the film immediately to ensure films got the problems or not. Not only we saw the teacher operation the machine. There are a lot of different thing between Taiwan and Japan. first in front of every door they put hand sanitizer. Next station we went to the VIP room that is really big ward for patients each room have the windows to see the scenery will not feel like jail on morning the sun rise up and sunshine shoot in to the room.in Japan privacy to patient is the most important thing





# General imaging

正面	80kv	250mA	152msec
側面	80kv	400mA	400msec
斜位	80kv	320mA	320msec
立位	90kv	500mA	80msec

The number will  
change by thickness

**Q:** why the patient taking picture with chest only can use stand not lie down on the bed?

**A:** because of the patient with pulmonary edema and pneumothorax



# The first weekend in Japan Asakusa(Kaminarimon Gate)





# Skytree 晴空塔



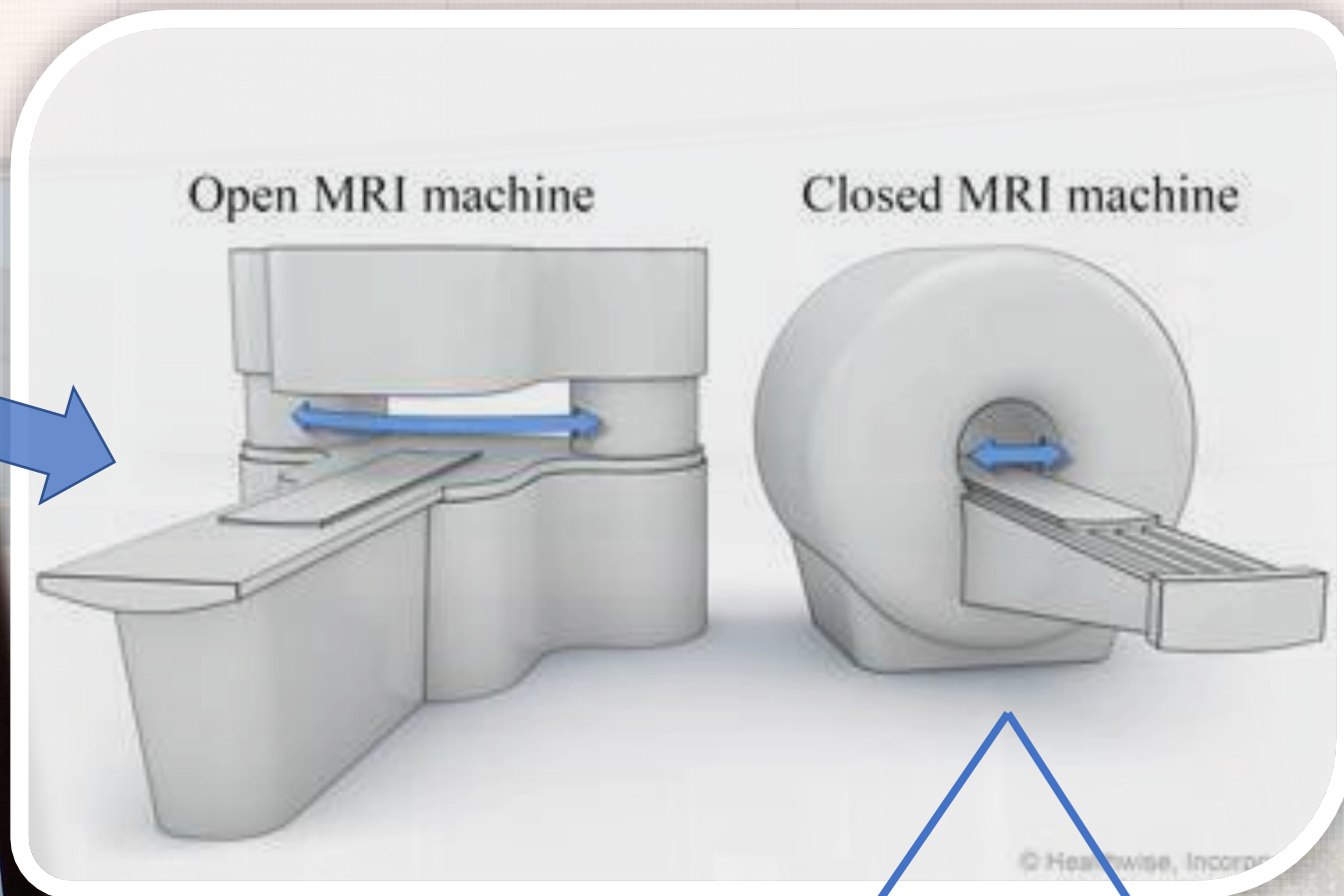


# MR I

適合幽閉症患者在手術室

For claustrophobia patient

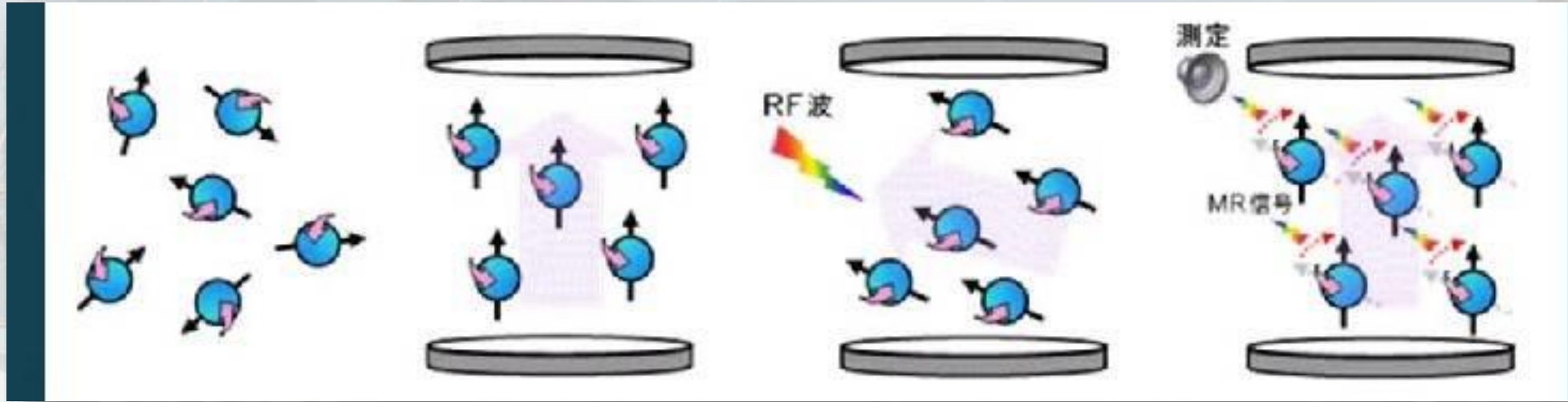
In the operation room



Superconducting magnet  
超導磁鐵

Permanent magnet  
永久磁鐵

# MRI principle MRI 原理



MRI throw out the strong magnetic force let proton H, direction same.  
When proton H returns the original situation relax single, and we accept.



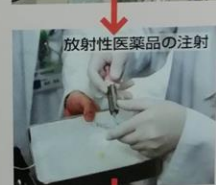
# Nuclear medicine 核子醫學

There are two kind of injection for different pations

## 運動負荷心筋シンチグラフィとは

運動により心臓に負荷がかかった状態で行う検査が「運動負荷心筋シンチグラフィ」です。

運動により心臓に負荷がかかったと判断された時に「放射性医薬品」を注射し、その薬が心臓に十分にいきわたったら運動を終了していただき、心臓の動きを検査します。



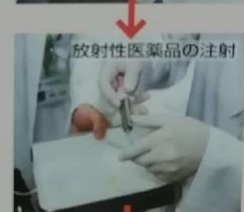
### 運動負荷の注意点

運動をして心臓に負担をかけることにより、ごくまれに心臓の発作が起こる事があります。しかしこの検査には必ず医師や専門スタッフが立会っており、直ちに適切な処置を行うことが可能です。どうぞ安心して検査を受けてください。



## 薬物負荷心筋シンチグラフィとは

心臓に負荷をかける方法には、運動によるもの以外に、薬によるものがあります。薬によって心臓に負荷をかける検査を、薬物負荷心筋シンチグラフィといいます。





# Ueno 上野動物園





# Tokyo tower 東京鐵塔



509m



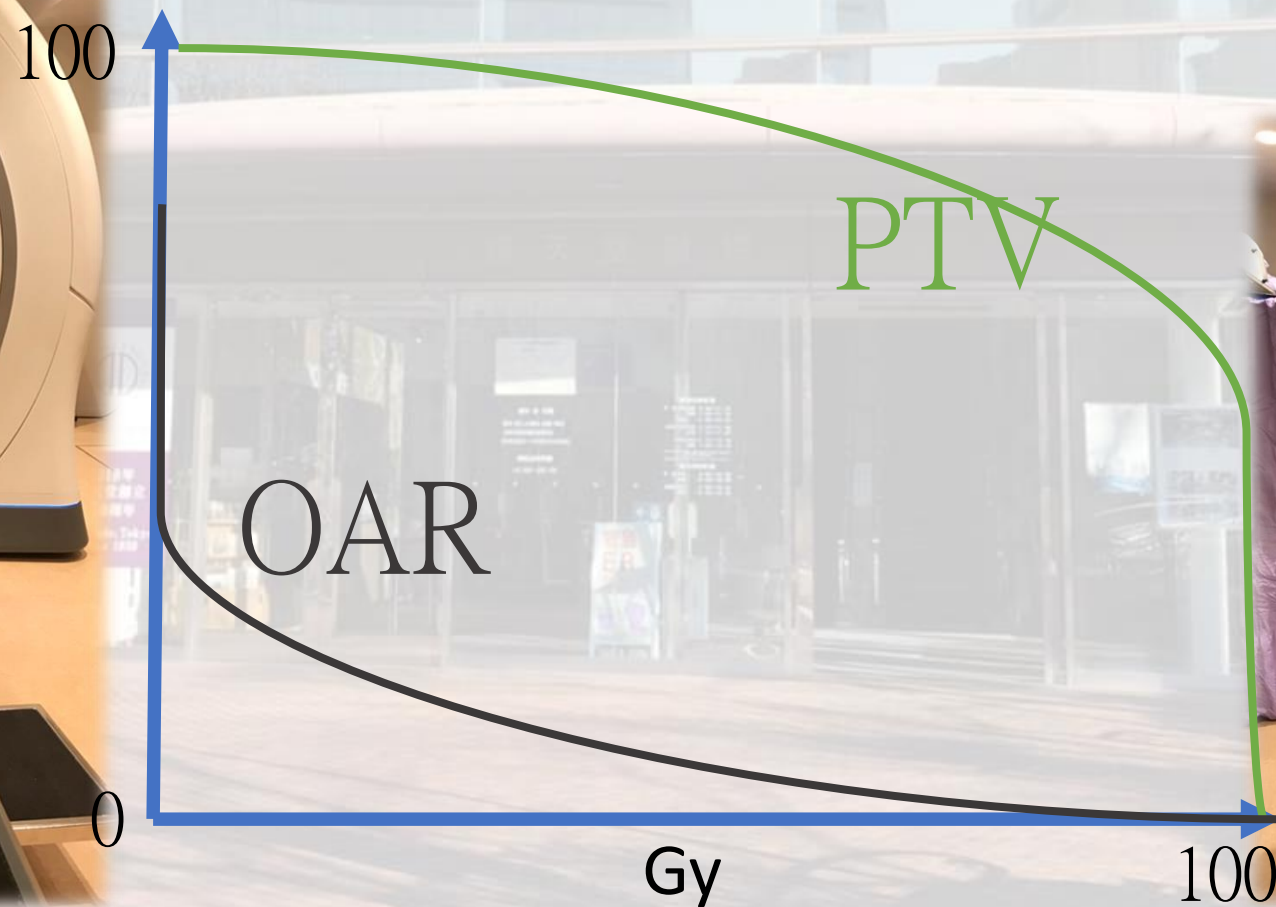
330m





# Radiation cure

- We learned about MLC(multi-leaf collimator) and (dose volume histogram)DVH





# Radiation cure





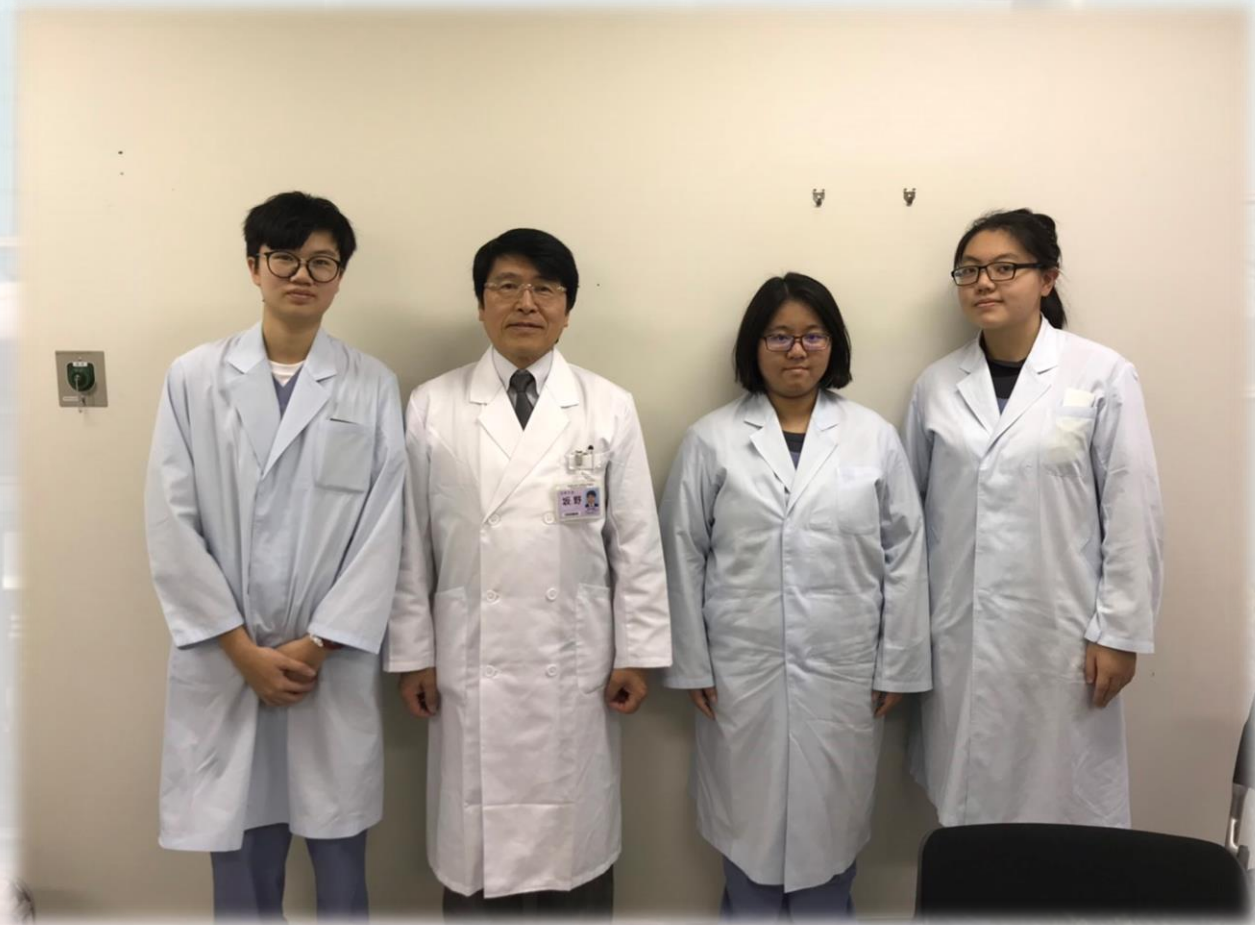
# Shinjuku 新宿





# Surprise day

We are very thankful to 坂野 teacher taught us about many information with radiation he is friendly to student and patiently explain radiology equipment introduce each function the most important thing is that the teacher chats with us in three languages





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the end

