# What Is "Pediatric Surgery"?

# 賴勁堯

**Department of Pediatric Surgery** 

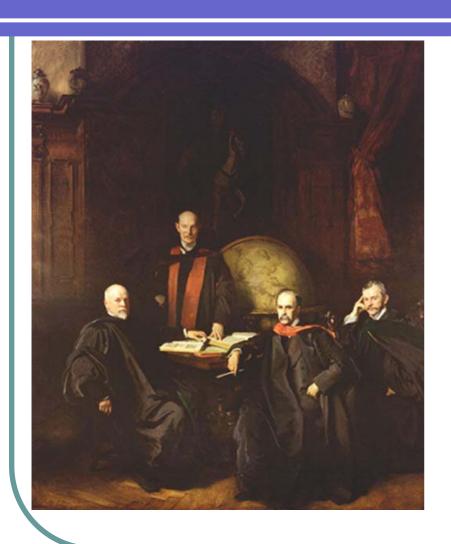
長庚兒童醫院 Chang Gung Children's Hospital



# History of modern surgery

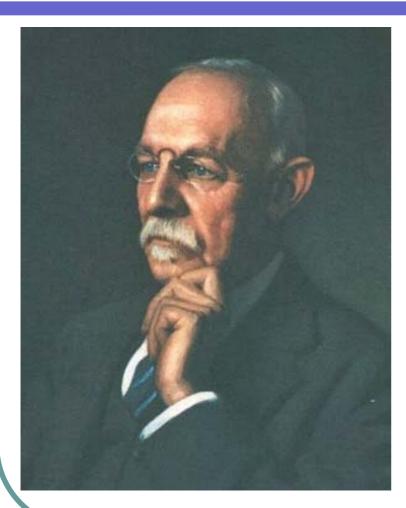
- Johns Hopkins the founding four doctors
  - William Stewart Halsted (surgeon)
    - 1852-1922
  - William Osler (physician)
    - 1849-1919
  - William Henry Welch (pathology)
    - 1850-1934
  - Howard Atwood Kelly (gynecologist)
    - 1858-1943

# The "four doctors" in Hopkins



From left to right:
William Henry Welch,
William Stewart Halsted,
William Osler,
Howard Kelly

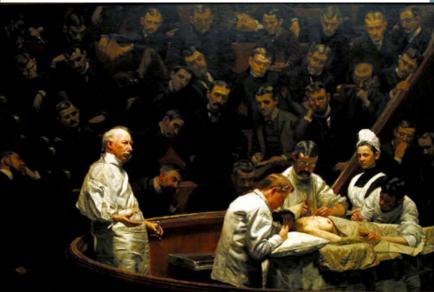
### William Stewart Halsted



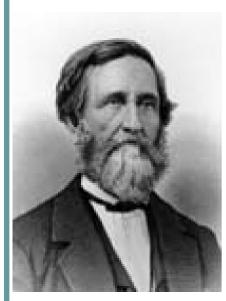
- Father of modern surgery
- Hernia
- Breast surgery
- Surgical gloves
- Surgical residency
- Opiate user ?

## Surgery before the era of the gloves





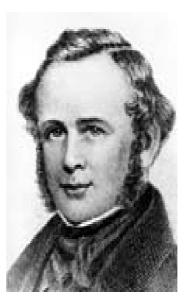
### Pioneers in anesthesia



1842



Crawford W. Long William T.G. Morton 1846



**Horace Wells** 1844



**Charles Jackson** 1846

# History of pediatric surgery

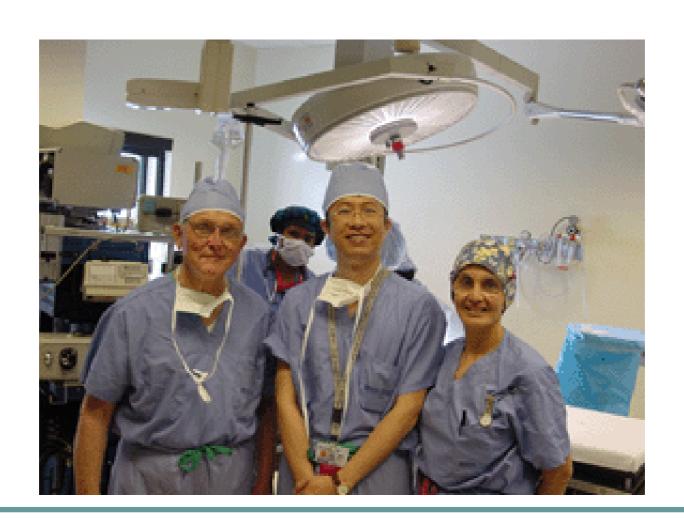
#### Boston children's hospital

- William Edward Ladd (1880-1967)
  - Abdominal surgery
  - Ladd's procedure for intestinal malrotation
- Robert Edward Gross (1905 1988)
  - The first operation for PDA (1938/8/26)
- Hardy W. Hendren (1926 present)
  - Cloacal malformation, the most severe form of the imperforate anus

### **Professor Robert E. Gross**



# Professor Hardy W. Hendren



## What do we deal with everyday?

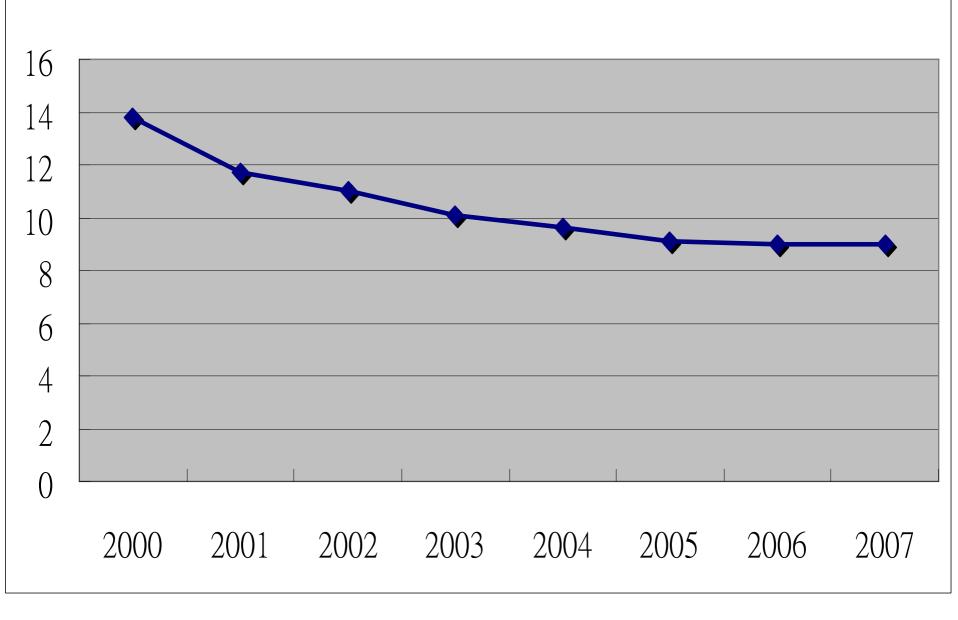
兒童外科(小兒外科) 處理事項包括下列幾項:

- 1. 新生兒先天畸型的矯正。
- 2. 與產科醫師合作,評估產前發現的外科疾病,選擇最適當的處理方式。
- 3. 兒童胸腹外傷的治療與照顧。
- 4. 兒童腫瘤的相關手術治療。
- 5. 兒童泌尿系統異常的手術治療。
- 6. 兒童胸腔呼吸系統異常的手術治療。
- 7. 兒童胸腔鏡、腹腔鏡的微創手術治療。

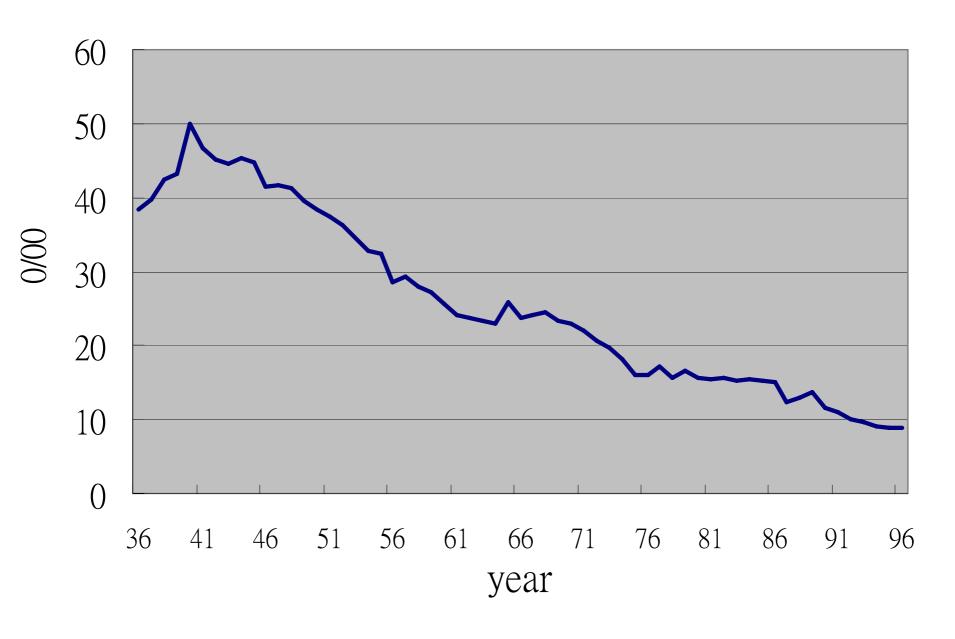
### The worse time/the best time?

- The progress of technology
- The tendency of birth rate
- The socio-economic level of the patient/family
- Insurance payment

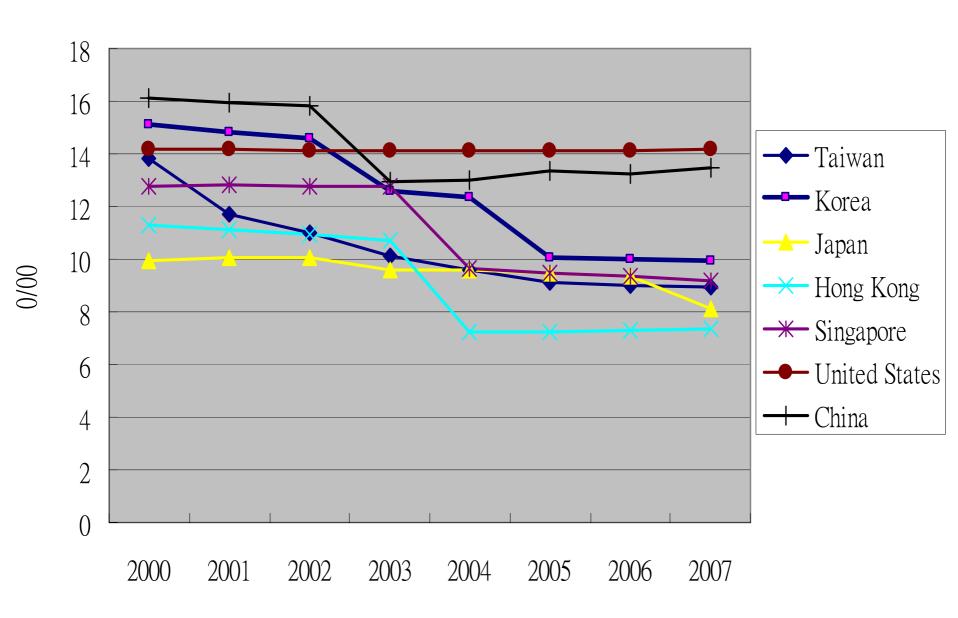
#### Birth rate in Taiwan - 1999 ~ 2007



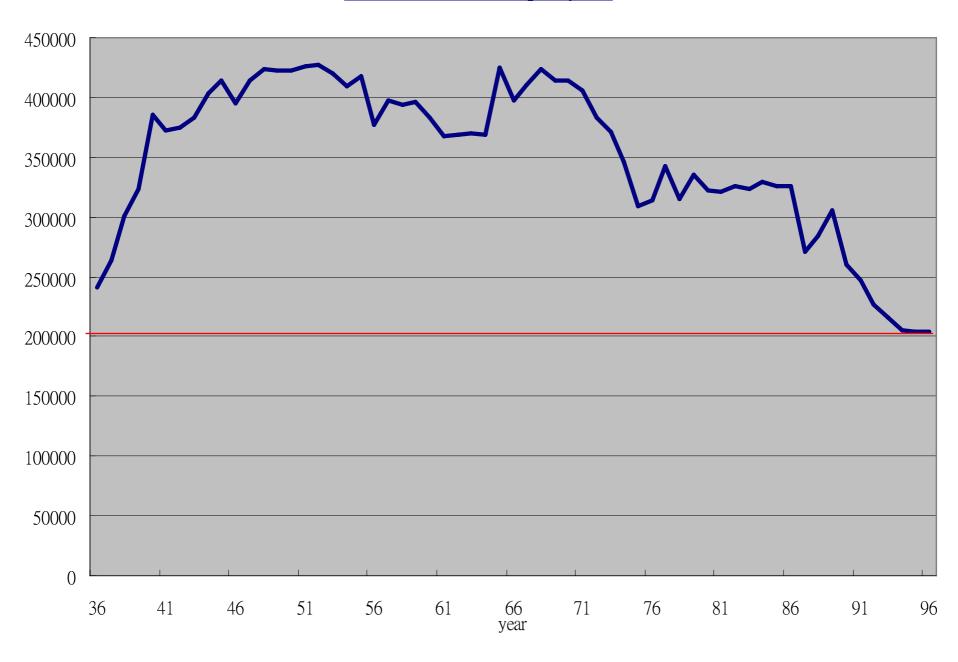
#### Birth Rate - since the year 1947



#### Birth Rate



#### Newborn number per year



## What is the impaction of 20,0000

- Most of the incidences of the major diseases in PS: 1/10,000 → 20 cases per year in Taiwan → less than 2 cases per month in Taiwan
- The learning curve for a young surgeon will be very long.
- Our hospital is <u>the only</u> institution which fulfill the training standard in United States.