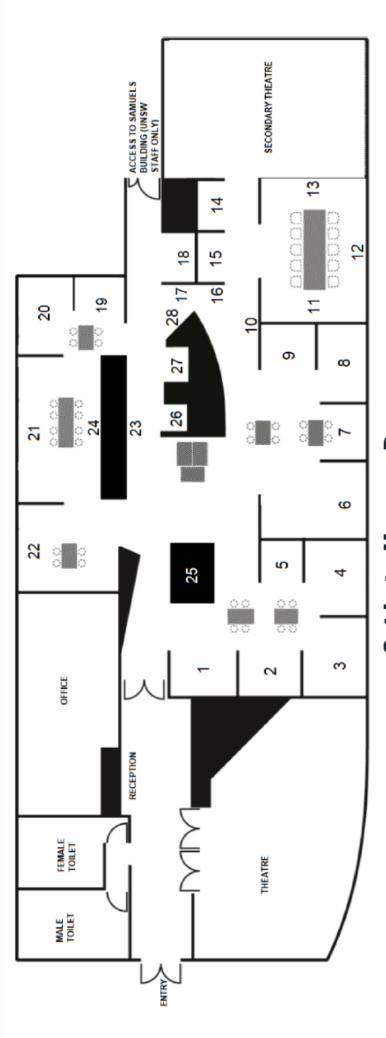


# Museum Map



# **Guide to Museum Bays**

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8. Heart

- 2. Oral cavity & oesophagus
- 3. Stomach
  - 4. Liver
- 5. Pancreas & biliary tract
  - Intestine
- 7. Brain & spinal cord

Female reproductive tract

- 15. Bladder, prostate & testis
  - Infancy & childhood
    Endocrine
    - 17. Endocrin 18. Trauma

9. Library 10. Kidney

11. Blood 12. Lung 13. Skin

- 19. Congenital & genetic
- 20. Inflammation & healing 21. Neoplasia (tumours)
- 22. Blood vessels
- 23. Infectious disease case studies
  - 24. Musculoskeletal
- 25. Medical technology 26. Vaccines
  - Vaccines
    Smoking & vaping
- 28. Multi-drug resistance

# Foyer: Beef tapeworm (153)

Location: Opposite reception desk

**Description:** This tapeworm was around 3.5 metres long.

It is a parasitic worm that lives in the digestive tract of vertebrates and absorbs food, leaving the host malnourished.



#### Bay 2: Larynx (diphtheria) (162.2)

Location: Shelf 10

**Description:** This larynx, from a 9-year-old boy infected with diphtheria, is enlarged, inflamed and haemorrhagic.

Diphtheria causes a membrane to form in the throat, which eventually blocks the airway. A small piece of this membrane is visible in this specimen.

Diphtheria is highly preventable. Neither the patient or his family were vaccinated.



#### **Bay 3: Stomach ulcer (1176.3)**

**Location: Shelf 8** 

**Description:** This specimen is part of the stomach and jejunum (small intestine) and shows a stomal ulcer, caused by the *Helicobacter pylori* bacteria.

This bacteria was proven to cause stomach ulcers by Australian doctor Barry Marshall, who drank a vial of the bacteria to confirm his findings. He received the 2005 Nobel Prize in Physiology or Medicine.



#### Bay 4: Hydatid cyst (2999)

Location: Shelf 6

**Description:** This liver contains a cyst (sac of fluid) about 6cm x 5cm in size, that has compressed the rest of the liver tissue.

Hydatid cysts are caused by tapeworms. When the eggs are ingested, they hatch in body tissue, and form the cysts as they develop.



#### Bay 5: Gallstones (499.5)

Location: Shelf 1

**Description:** This gall bladder contains several large stones, which have stretched its shape.

Gallstones are usually made of cholesterol or bilirubin (a substance formed when blood cells are broken down).



#### Central displays: Metastatic melanoma

Location: Outside bay 5

#### **Description:**

These specimens are all from the same patient and show how a melanoma (skin cancer) can spread throughout the body. The dark spots on each specimen are metastases (tumours that developed from the original one).



## Central displays: Teratoma (618)

Location: Outside Bay 6

#### **Description:**

This is a benign tumour which arises from our sex cells (sperm or ova). This tumour contains hair, teeth, skin and cells which support the brain and its functioning.



# Bay 6: Polyposis (313)

Location: Shelf 6

**Description:** Familial adenomatous polyposis is the formation of polyps - masses of abnormal cells that form from the lining of the colon. They are benign but can become cancerous if not treated.

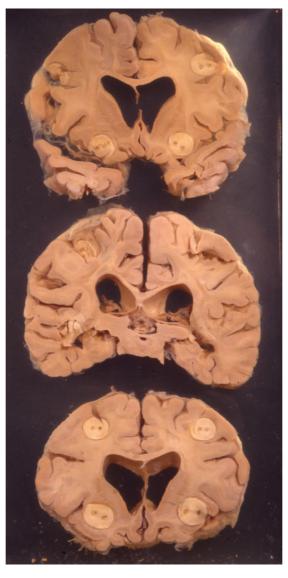
Polyposis is genetic and runs in families.



# Bay 7: Multiple sclerosis (645)

Location: Shelf 9

**Description:** This specimen shows three sections of a brain with multiple sclerosis. The disease has caused the brain to deteriorate - it is smaller than it should be, and has larger-than-normal gaps in the centre.



#### Central displays: Coal miners' lung (1236)

Location: Between bays 7 & 8

**Description:** This specimen is from a 75 year old retired miner, and shows coal miners' pneumoconiosis, a lung disease caused by breathing in certain types of particles (such as coal dust. It also shows signs of emphysema, silicosis and cancer.



#### Bay 8: Myocardial infarct (heart attack) (1007)

Location: Shelf 10

**Description:** This specimen shows a heart attack, which has caused the left wall to become very thick.

It has also caused scar tissue to form (from tissue damaged by a loss of blood supply) at the bottom, or apex, of the heart.



#### Central displays: Polycystic kidney (660)

Location: Between bays 8 & 9

#### **Description:**

This kidney is the result of a genetic disorder. This disorder leads to the development of many fluid filled cysts in one or both kidneys. Severe cases like this can be fatal.

A healthy kidney should be around the size of a fist or slightly smaller.



#### Bay 9: Megaureter (2738)

Location: Shelf 7

**Description:** A blockage of the urinary tract caused the bladder and ureters of this patient to dilate and thicken. The kidneys are smaller than they should be, and the left one is hydronephrotic (stretched & swollen).



#### Central Displays: Gastric trichobezoar (3259)

Location: Between bays 9 & 10

**Description:** A trichobezoar is a mass of compacted hair. This one was found in the stomach of a 14 year old girl with trichotillomania, a psychological condition that causes patients to pull out their hair and, in this case, eat it.



#### Bay 10: Rejected kidney transplant (3161)

Location: Shelf 6

**Description:** This kidney was transplanted and then removed 12 days later, after it failed to function.

This can happen if the organ is not a close enough match - the proteins on the donor's cells must closely match those of the recipient, or the immune system will attack the organ.



# Bay 11: HIV PrEP medication (3257)

Location: Shelf 2

**Description:** PrEP (pre-exposure prophylaxis) can protect people from contracting HIV. Combined with other medical breakthroughs like antiretroviral therapy (ART, which cannot cure HIV but can reduce or eliminate symptoms), this transformed the way that HIV is managed.

An estimated 16.5 million HIV/AIDS related deaths have been avoided since 2001.



# Bay 12: Metastatic lung cancer (507)

**Location:** Shelf 4A

**Description:** This is an example of how lung cancer can metastasise (spread to new parts of the body). The specimen shows a lung with a small primary tumour, and a liver that is dramatically enlarged with cancerous nodules throughout.



#### Bay 13: Cutaneous horn (1607)

Location: Shelf 6

**Description:** Cutaneous horns are structures of compacted keratin that grow from the skin, most commonly when it is exposed to radiation or burns.

Over 60% are benign, but they can be malignant skin cancers, so should be checked carefully.



#### Bay 14: Endometriosis (398)

Location: Shelf 10

**Description:** Endometriosis is a disease in which tissue similar to the lining of the uterus grows outside the uterus. It can cause severe pain in the pelvis and make it harder to get pregnant. This specimen shows a large mass of tissue in the right ovary & fallopian tube.

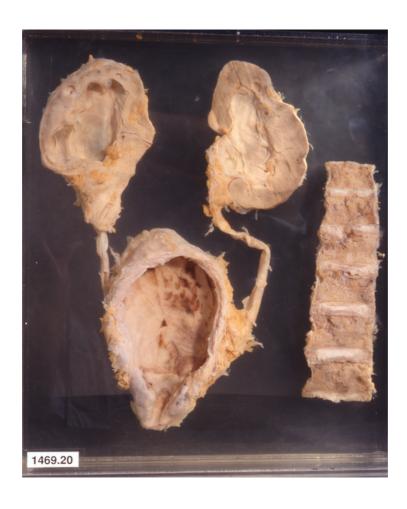


# Bay 15: Prostate cancer (1469)

Location: Shelf 6

**Description:** Prostate cancer is the 8th leading cause of death in Australia, and the 4th for males.

This specimen shows the prostate, ureter, bladder, kidneys and vertebrae, all of which have been affected by cancer that originated in the prostate.



#### **Bay 17: Goitre (952)**

Location: Shelf 1

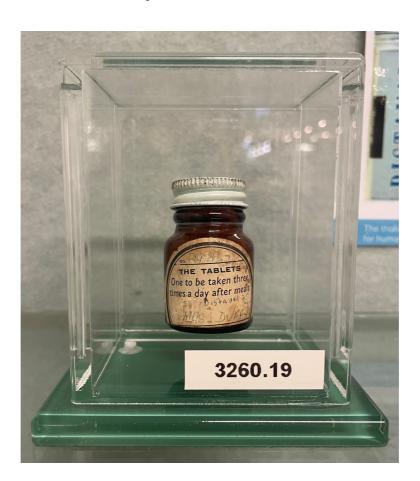
**Description:** A goitre is an enlarged thyroid, which can have a range of causes, including iodine deficiency and autoimmune conditions. The thyroid produces hormones which control many of the body's functions, including heart rate, temperature, metabolism and energy levels.



#### Bay 19: Thalidomide (3260)

Location: Shelf 6

**Description:** Thalidomide is an oral medication used in cancer treatment. When first released in 1957, it was used to treat anxiety, sleep disorders and morning sickness. In 1961, it was found to cause severe birth defects if taken by pregnant women, and taken off the market until 1998. It is now only used in cancer treatment.



#### Bay 20: Tuberculosis (924A)

Location: Shelf 4

**Description:** Tuberculosis is one of the biggest killers worldwide and infects 1 in 4 people.

The white part at the top of the lung is dead tissue, where the immune system has killed off the lung to try and contain the infection. This is called latent tuberculosis, and while symptoms may disappear, the infection can recur later on.



#### Bay 21: Breast cancer (350)

Location: Shelf 6

**Description:** Breast cancer is the 12th leading cause of death in Australia, and the 5th leading cause for females.

This specimen shows a tumour behind the nipple, which appears as a greyish mass. It was removed with a mastectomy, and the patient also had an oophorectomy (both ovaries were removed).



#### **Bay 22: Gangrene (1450)**

**Location:** Shelf 18

**Description:** Gangrene is the death of body tissue due to a lack of blood flow or severe infection. Gangrenous tissue cannot be saved, but if treated quickly, the spread can be minimised.



# Bay 22: Haemangiosarcoma (3226)

Location: Shelf 4

**Description:** This specimen demonstrates a cancer arising from the lining of blood vessels. This cancer more commonly affects dogs than humans. It is rather aggressive and is treated in an aggressive fashion.



# Bay 23: COVID-19 vaccines

Location: Shelf 1

#### **Description:**

These vials contain vaccines that control COVID-19. They were developed more quickly than other vaccines in history because of the amount of resources and collaboration invested. It is estimated that these vaccines have already saved tens of millions of lives.



#### Bay 24: Achondroplasia (1237)

**Location:** Shelf 3

**Description:** Achondroplasia is a genetic disorder that prevents cartilage changing to bone as it develops. Its symptoms include dwarfism, limited motion range at the elbows, large head size and bowing of the legs (shown here).



# Bay 25: Hip replacement (2486)

Location: Shelf 10

**Description:** The femur (thigh bone) has had its head replaced with a titanium fitting. The hip joint has been replaced with an UHMWPE (ultra-high molecular weight polyethylene, a type of plastic) socket.

Hip replacements are used for joints which are damaged or deteriorated. About 44 000 Australians get a hip replacement each year.



# Bay 26: Rabies vaccine (2516)

**Location:** Shelf 3

#### **Description:**

This tapeworm was around 3.5 metres long.

It is a parasitic worm that lives in the digestive tract of vertebrates and absorbs food, leaving the host malnourished.



#### Bay 27: Emphysema (156)

Location: Shelf 2

#### **Description:**

This lung demonstrates the chronic, progressive disease called emphysema. In emphysema the elastic tissue in the lungs is destroyed, leading to destruction of the air sacs.



Thank you for visiting!