

Large-print book

Please do not remove from the gallery






Medicine and Treatments: The GSK Gallery

Medicine: The Wellcome Galleries

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Contents

Medicine and Treatments	5
gallery introduction	
Accessible features	6
Gallery layout	8
Gallery map	9
 Inside Surgery	10
 Rethinking Treatments	30
 Our Journey With Drugs	46
Medicine: The Wellcome Galleries	66
overview map	

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Medicine and Treatments

gallery introduction

The world has seen dramatic improvements to medicine over the past 400 years. New theories and techniques now give us extraordinary results and a wide range of choice when deciding how to care for ourselves. At best, treatments can relieve create difficult choices or risk, where the outcome is uncertain. As well as surgery, therapies and drugs, successful treatments involve trust, innovation and sometimes luck.

Medicine: The Wellcome Galleries consists of five galleries, each looking at a specific area within medicine. There is a large-print book for each of the galleries.

Accessible features

Features for blind and partially sighted visitors

Two touchable objects are located in the first section of the gallery. They are accompanied by large-print and Braille labels, and audio descriptions of the objects are provided through headphones.

There is an audio soundscape playing on a loop in the entrance, between this gallery and Medicine and Communities. This gallery features a small room with overhead speakers playing pharmacy sounds which are triggered by a person entering. There is also a film playing on a loop, with audio played via speakers and projected into the gallery.

An audio description app called Audio Eyes is available on iOS devices for the Medicine and Information Age galleries. The app offers audio-only descriptions for selected exhibits and enables you to roam freely through these galleries. You can either download it from the app store or borrow a free device from the Information desk located at the Exhibition Road entrance.

Features for Deaf and hard-of-hearing visitors

This gallery features films where the audio is provided through single-ear listening cups which include induction loops. Please look out for the induction loop 'ear' symbol for these exhibits and turn your hearing aid to the T setting. Some videos are silent and all videos with audio contain subtitles. Transcripts and British Sign Language are also available for selected audio where signposted.

Accessible events

A programme of accessible events will be delivered within the gallery, including audio-described tours. Please refer to the Science Museum website for the schedule and additional details, or ask at the museum Information desk. These accessible events are part of a wider Medicine events programme for adults and children.

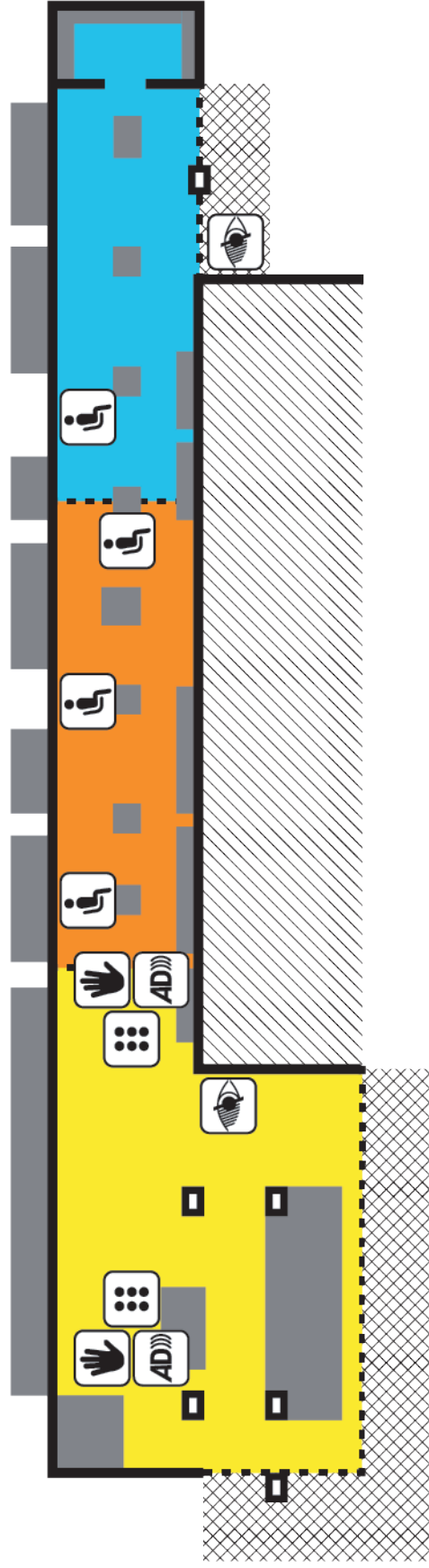
Wi-Fi is available throughout the gallery.

Gallery layout

The Medicine and Treatments gallery is located on one floor. It is a long and thin rectangular-shaped space that can be accessed from two entrances at opposite ends: the Exploring Medicine gallery and the Faith, Hope and Fear gallery. The gallery is about 4 metres wide and 62 metres long. An atrium runs along one side of the gallery, providing a view down to level 0 and the Making the Modern World gallery. Lifts and stairs near both entrances provide access to the rest of the museum.

The gallery is divided into three zones and visitors can browse them as they wish. Each section is introduced by a star object and text (on tall red panels). Within each section are a series of display cases with important objects highlighted by cream-coloured text panels.

Gallery map



- | | | |
|------------------------|--|-------------------------------|
| Inside Surgery | Wall | Seating |
| Rethinking Treatments | Show case | Large-print and Braille books |
| Our Journey With Drugs | Atrium | Braille |
| | Medicine: The Wellcome Galleries (continued) | Audio Description |
| | | Touch object |

Inside Surgery

Section introduction

Of all the treatments we have devised, surgery is the most dramatic, both in its successes and its failures. What was once a brutal last resort is now a highly technical and precise life-saver. Surgery repairs our bodies, relieves our pain or saves our lives, thousands of times a day in hospitals across the world.

From simple procedures under local anaesthetic to entire organ transplants, surgical treatments change lives. Surgeons must be skilled with their hands while minimising the dangers of blood loss and infection. Our expectations of them are high: cure us, remove our pain and make no mistakes.

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Objects: How to mend a broken heart



These are some of the things you need for a heart transplant, from a team of nine surgical staff and specialist equipment, to a donor's priceless gift. This operation can give recipients a new chance at life. But for these patients the transplant is not the end of the journey – they must take antirejection drugs for the rest of their lives.

Example of the citation and pin badge medal of the Order of St John UK award given to Hayley Jordan

Lent by the Museum of the Order of St John, London

Object nos. L2019-522, L2019-523

Gold Heart Organ Donor Family Pin, 2018. Donated by NHS Blood and Transplant. Object no. E2019.0289.2

One month's medication after transplant

Eric's running T-shirt

Book for recording medication

Eric's 2017 medal from the Transplant Games

Object no. E2017.0480

Surgical instruments. Object no. E2019.0331

Organ transplant box. Object no. E2019.0289.1

Organ donor card. Object no. E2019.0058.4

Object: Da Vinci[®] Classic robot-assisted surgical system
1999–2001



After reassuring his patient that the arms would be operated by him and not a machine, in 2001 Professor Ara Darzi performed the first ever operation in Britain using a da Vinci robot. By manipulating the robot's arms, it is claimed surgeons have better accuracy, a more comfortable operating position and a better, 3D, view. Critics argue it has little proven benefit over conventional keyhole surgery.

Donated by Lord Darzi of Denham OM KBE PC FRS
FREng FMedSci, Director of the Institute of
Global Health Innovation, Imperial College London
Science Museum Group
Object nos. 2016-556/1, 2016-556/2

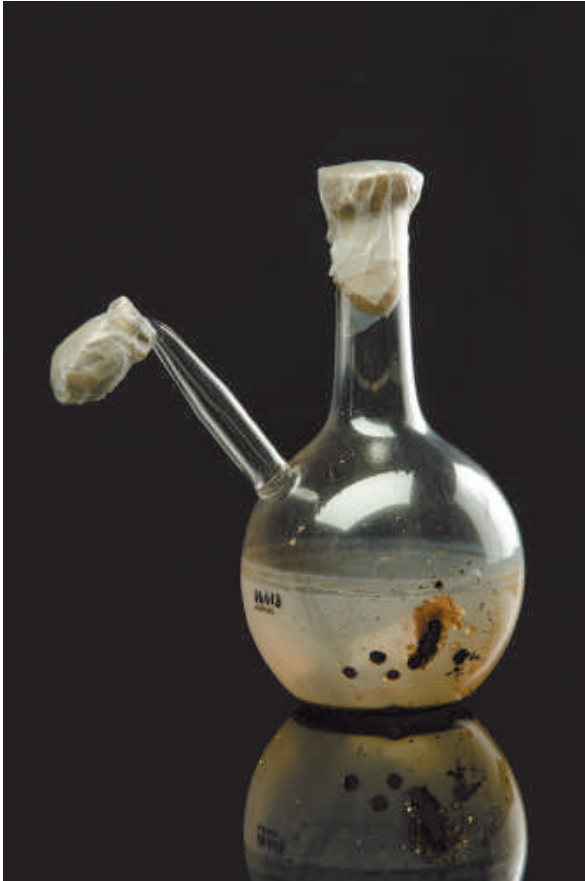
Object: Chair for tooth extractions
1700–1800



With a tilted headrest, this chair encouraged patients to lean back so a barber-surgeon could remove teeth more easily. Barber-surgeons historically performed operations such as tooth extraction and also cut hair. Alcohol and herbs were the only pain relief they could offer.

The Netherlands
Science Museum Group
Object no. 1981-2215

Objects: Experimenting with Lister 1830–1880



Joseph Lister experimented with ideas about infection, often assisted by his wife, Agnes. Using household items and specially made glassware, he noticed that urine exposed to air decomposes, while urine not exposed to air remains intact. Lister concluded that something in the air – germs, as we now know them – caused infection.

He continued to experiment, adapting his antisepsis technique along the way.

England

Lent by Wellcome Collection
to the Science Museum Group

Joseph Lister's microscope, 1830–1850

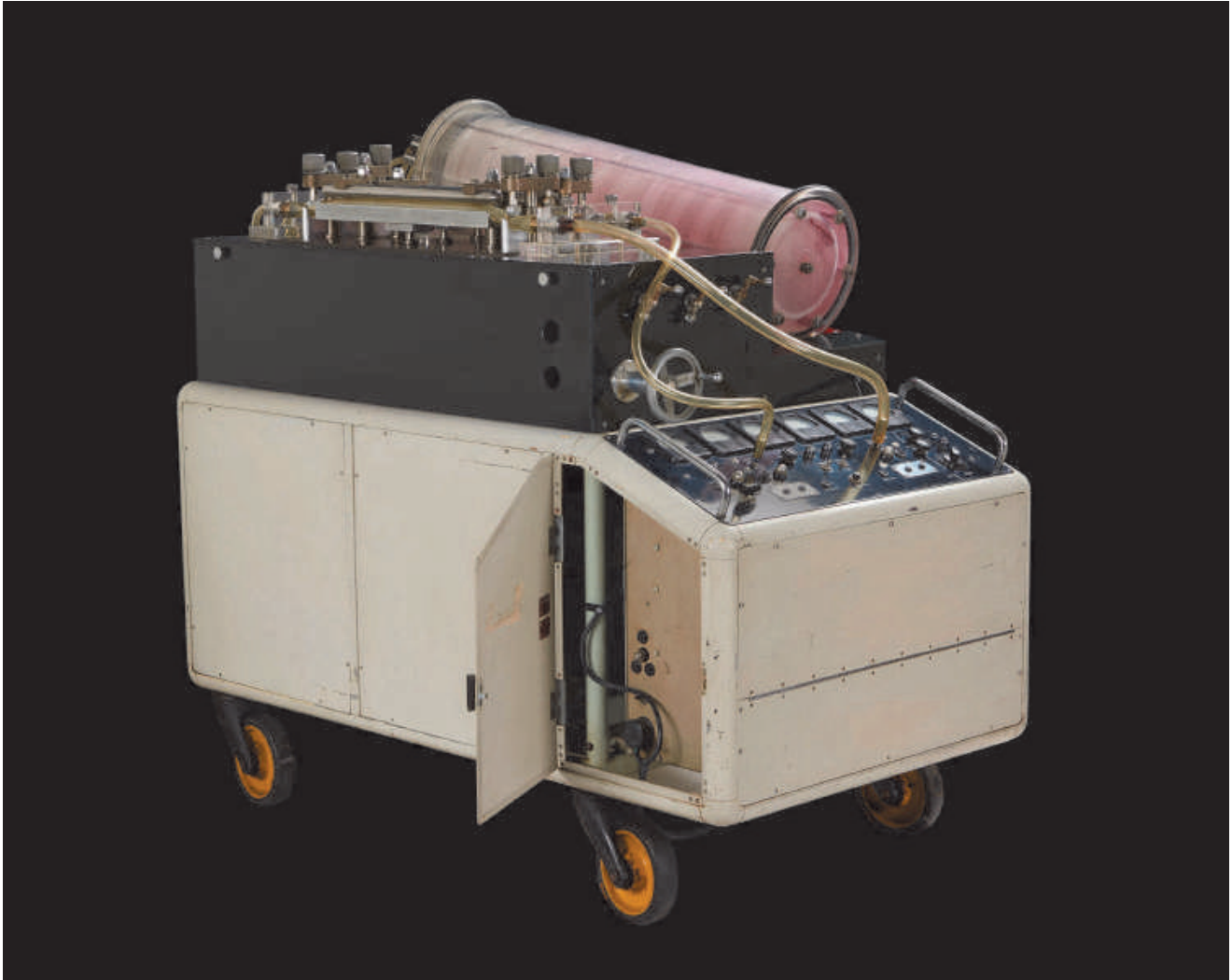
Object no. A604181 pt 1

Joseph Lister's laboratory glassware, 1860–1880

Some replicas

Object nos. A629468, A629483, A629484, A629489,
A629496, A641005, A641022

Object: Melrose heart-lung machine
1950s



Operating on a moving, beating heart is difficult. The Melrose machine took over the heart's role during an operation, enabling the surgeon to stop it beating for the procedure. Blood was redirected through the machine, where a pump re-created the action of the heart. Rotating discs, over which oxygen was blown, re-created the lungs. It was first used in 1957 to repair a heart defect. The patient lived on for more than 25 years.

England

Lent by Wellcome Collection
to the Science Museum Group

Object no. A600308

Object: Treatments during the First World War 1979



This scene is of medical treatment and care during the First World War (1914–18). Stretcher-bearers carry the wounded to waiting ambulances. Those with minor injuries are treated before returning to battle. For the seriously wounded, it is the beginning of the road home, often with mental as well as physical scars.

England
Science Museum Group
Object no. 1986-1497

Objects: Tools of the blood-letting trade 1700–1850



To drain blood required a sharp-tipped blade, or lancet, and a bowl. In Europe until the 1850s, who unlike higher-ranking medical doctors performed surgery, extracted teeth and cut hair.

The red-and-white pole still seen outside barbers' shops was originally an advertisement for blood-letting – red for blood and white for bandages.

Lent by Wellcome Collection
to the Science Museum Group

Blood-letting lancets in a silver case, 1750–1850

England

Object no. A647881

Barber's shaving bowl, 1700–1750

The Netherlands

Object no. A45685

Objects: A story of trephination

4000 BC – 1920s



Why this person underwent trephination 4,000 years ago is unknown, but regrowth around the holes suggests they survived. Their scalp would have grown back, although the wound would have been vulnerable to infection for some time.

Flint, volcanic rock, shells or shark teeth might have been used to cut, while mandrake root or coca leaves may have provided pain relief.

Trephinated skull, 2200–2000 BC

Palestine

Lent by Wellcome Collection
to the Science Museum Group

Object no. A634844

Tools for trephination, 4000 BC–1920

Includes replicas

Lent by Wellcome Collection
to the Science Museum Group

Object nos. A651980/1, A652069/1, A680632

Dried coca leaves, 1920s

Donated by British Drug Houses Ltd
Science Museum Group

Object no. 1926-736/2

Object: Amputation saw
1500s



Saws such as this one were used to cut bone as quickly as possible after the skin and muscle were cut away by knives. Before the introduction of pain relief and infection control in the mid-1800s, speed was a surgeon's only means of ensuring a patient survived an amputation. The stump was then dressed with water, wine and herbal lotions, before the long healing process began.

Europe

Lent by Wellcome Collection
to the Science Museum Group

Object no. A241432

Rethinking Treatments

Section introduction

Health care in the 1900s went through a revolution. Knowledge about the body and technical innovations sparked new theories on how we care for ourselves.

Discoveries such as radiation, electricity or the properties of sunlight revealed new channels of physical therapy. Play and talking offered ways to treat the mind.

With new treatments comes risk, but also hope. Some lived up to their promise, others faded away or were adapted. Conditions once thought to be fatal or untreatable could now be tackled, their symptoms managed even if their causes were not cured. Our expectations of what medicine can do are increasing as a result. But we still struggle to give up traditional treatments for those that are experimental.

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Object: Radium teletherapy device 1929



The egg-shaped container in this device was filled with radium, a radioactive chemical element. Known as a radium bomb, it was pressed against the skin to kill cancer cells. Known as teletherapy, the new technique was an alternative to surgery.

The container was lead-lined and moved from a distance using a bicycle brake cable, to protect medical staff.

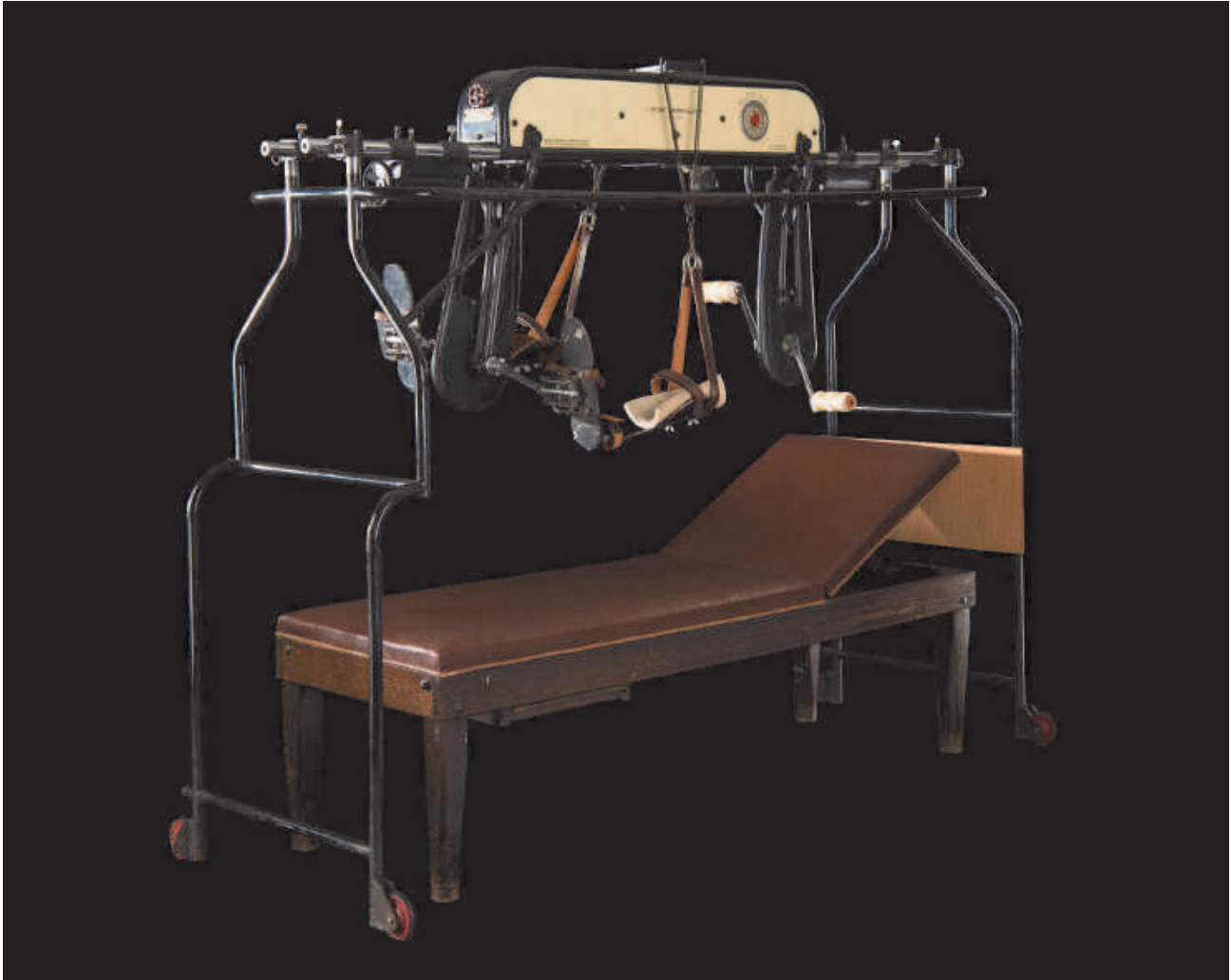
England

Made by Westminster Hospital, London

Lent by Wellcome Collection
to the Science Museum Group

Object no. A639472 pt 1

Object: Bed cycle for muscle strengthening 1949



Designed by the German-born Ludwig Guttmann and made from bicycle parts, exercise beds like this were part of a strengthening regime. They were used by Second World War veterans with spinal injuries at Stoke Mandeville Hospital in Buckinghamshire. Patients challenged themselves by watching the speedometer or increasing the resistance of the pedals. Although exercise had long been used in medicine, physiotherapy was growing as a specialism.

England

Donated by The Chaseley Trust

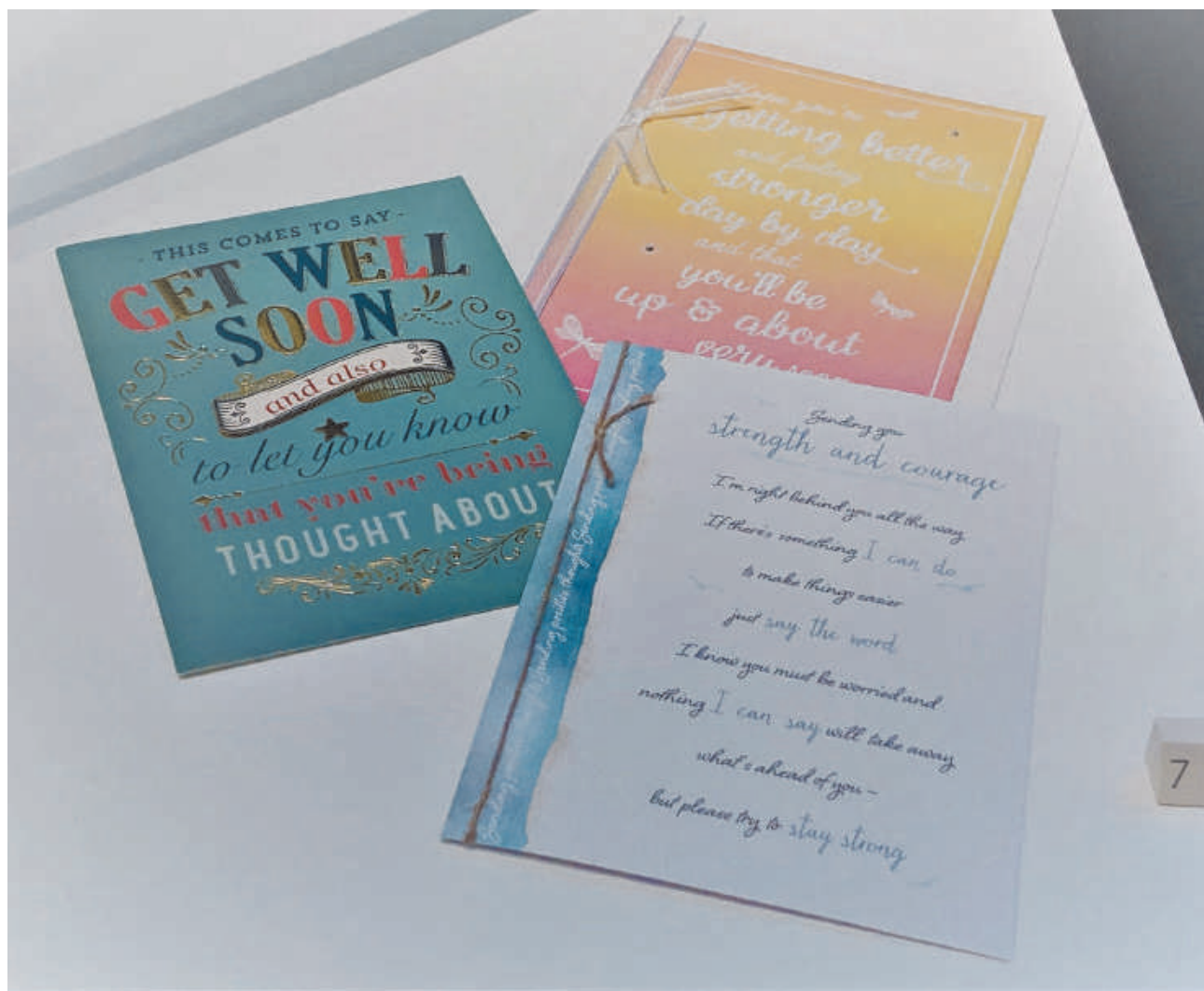
Science Museum Group

Object no. 1999-223

Participation project: Roads to recovery

Over two years, six people living with the effects of a brain injury worked with the Science Museum to tell their stories.

Object: Our 'get well soon' cards 2018



“Cards from friends and family remind us that people care for us. That we’re not alone on this journey. That we have a team behind us. Some cards have a special emotional value, keeping us strong through the rehabilitation. They inspire us to do everything we did before and to become more independent. They motivate us to keep trying. When we look at them now, we see how far we’ve come.”

Roads to recovery project participants, 2018
Science Museum Group
Object no. E2018.0836

Object: Electrotherapeutic cage
1890–1910



It was claimed that standing inside this electrically charged cage would cure nervous disorders with just a gently tingling sensation. The wire produced an electrical field, which generated strong currents in the body. It was designed by Dr Joseph Rivière from France, famous for his electrical innovations.

France

Lent by Wellcome Collection
to the Science Museum Group

Object no. A182649/1

Object: Communicating through play 1920–1970



Using toys in a sandbox, Margaret Lowenfeld devised a way for children to communicate their thoughts. At her clinic in London in the 1930s, children were observed playing. The child's arrangement of the toys was seen as an expression of their inner emotions.

Lowenfeld argued that the therapist could enter the child's non-verbal imaginative world in this way, later known as the 'world technique'. Such ideas were original, but widely criticised.

England

Donated by The Dr Margaret Lowenfeld Trust

Science Museum Group

Object no. 2009-14

**Objects: Moulded child and
adult radiotherapy masks**
2016–2018



Masks like these hold the head in a fixed position while cancerous areas are treated in the head or neck. Wearing the mask can feel claustrophobic. Radiotherapy harms healthy as well as cancerous cells, and can cause nausea, hair loss and fatigue. Patients often also receive surgery and chemotherapy drugs. Staff at Leeds Children's Hospital decorate radiotherapy masks to help younger patients relax during a potentially frightening part of their treatment.

Adult's mask

Lent by Dave Boyce

Object no. E2018.0253.1

Child's mask, 2018

Donated by Leeds Teaching Hospitals NHS Trust

Object no. 2018-484

Object: The Finsen lamp 1900



Hanging above you is Britain's first Finsen lamp. Invented in Denmark by doctor Niels Finsen, the lamp produced ultraviolet light. This one was presented to the Royal London Hospital in 1900. The hospital eventually owned 12 lamps, used in 20,000 treatment sessions known as seances. Antibiotics replaced light therapy for some skin conditions in the late 1940s, but light therapy is still used for conditions such as eczema, psoriasis and vitiligo.

Europe

Lent by Wellcome Collection
to the Science Museum Group

Object nos. A600314/1, A600314/2

Our Journey With Drugs

Section introduction

Innovations in drug therapy have boosted our health prospects. Discoveries such as penicillin and quinine have helped us live longer, more comfortably, and tackled conditions once thought to be untreatable. But some, such as thalidomide, threatened our trust in medicine. Balancing health benefits against possible risks can be a painful choice, and sometimes the side effects are unknown.

From chronic conditions such as cystic fibrosis to everyday ailments such as headaches, taking medicine is part of all our lives. As the number of drugs expands, so too do our expectations of what they can achieve. The combination of two established technologies has become a simple and widely used way to protect against malaria.

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Objects: Living with cystic fibrosis 2018



Sammie Read, who has cystic fibrosis (CF), needs everything shown here to manage her condition for just one month. CF is a genetic condition, with no known cure. Thick, sticky mucus builds up in the lungs and digestive system, creating challenging symptoms for the entire body. Each person's CF is unique and needs an individually tailored approach.

Antibiotics to prevent and treat infection

Object no. E2019.0139.1

Digestive enzymes to help the body break down food

Object no. E2019.0139.2

Steroids to treat infections and allergies

Object no. E2019.0139.3

Antacids to reduce excess acid caused by some medications.

Object no. E2019.0139.4

Nebuliser and medication to assist with breathing

Object no. E2019.0139.5

Portacath for injecting antibiotics directly into blood

Object no. E2019.0139.6

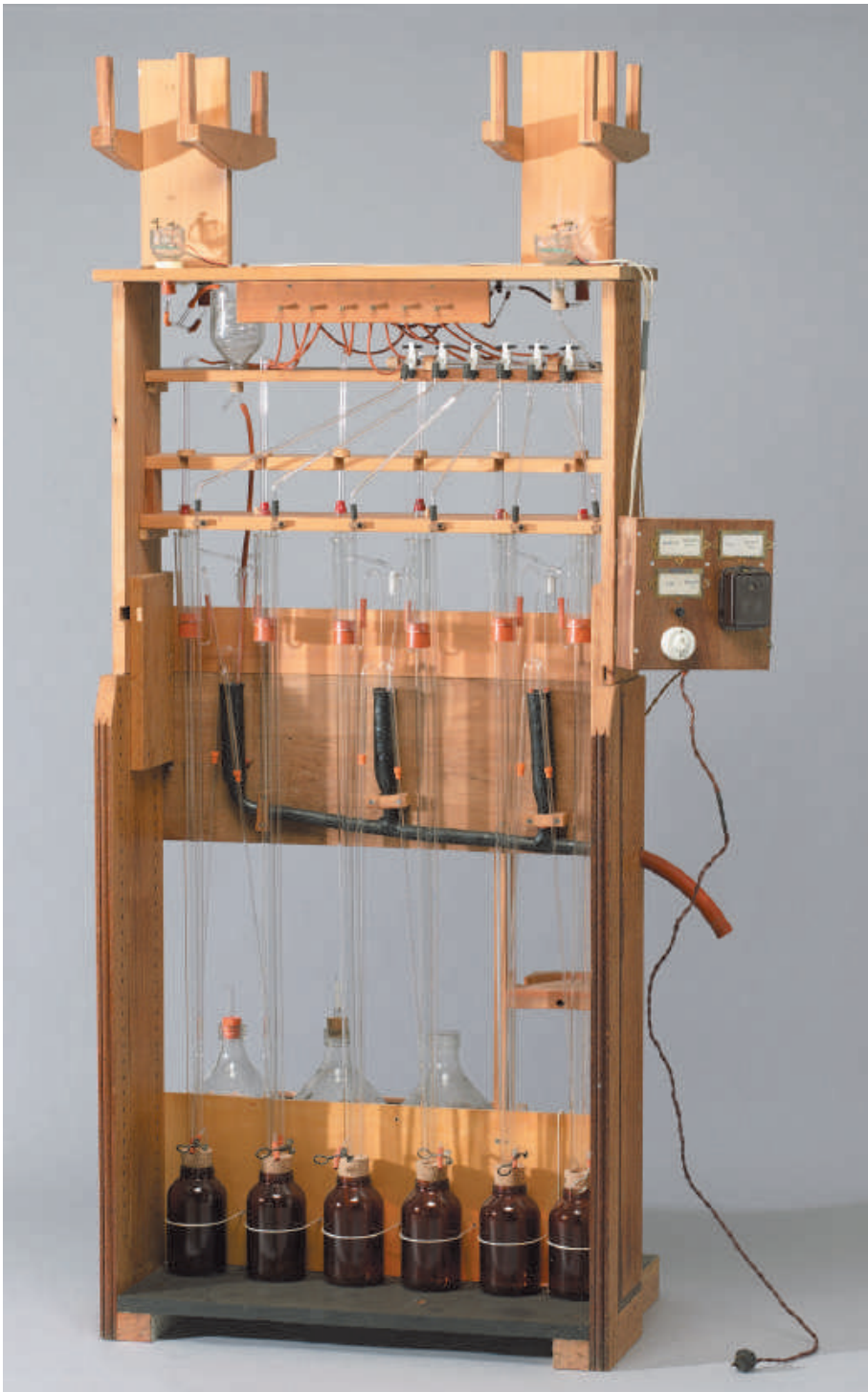
Fitbit.

Object no. E2019.0139.7

Patchwork quilt.

Object no. E2019.0139.9

**Object: Apparatus to purify
penicillium mould**
1986



After Alexander Fleming discovered penicillin in 1928, he struggled to extract a pure sample. Many teams were working on the same problem. The task was finally achieved in 1940 by a group at Oxford University, made up of scientists from around the world and with different expertise. This successful device was made from parts including sections of an oak bookcase from an Oxford University library.

Replica

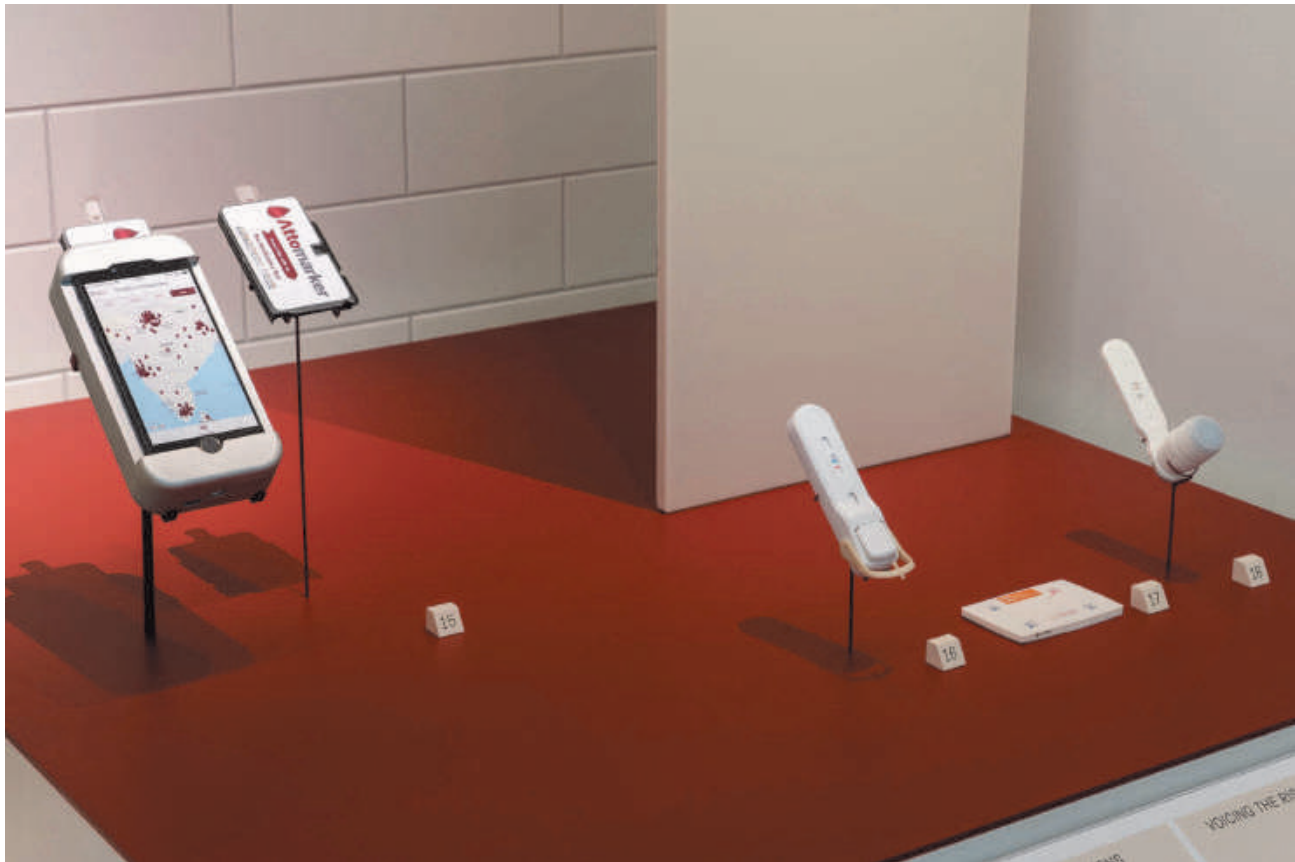
England

Donated by Norman Heatley

Science Museum Group

Object no. 1986-1116

Objects: Diagnostic prototypes 2017–2019



Using blood and urine samples, these diagnostic prototypes monitor people's health or detect enzymes responsible for resistance in some types of antibiotics. Teams around the world are developing fast, easy-to-use, hand-held tests to help healthcare professionals decide whether to prescribe antibiotics.

Accurate diagnosis reduces unnecessary antibiotic use. Overuse and misuse of antibiotics – including use for viral infections – are causes of resistance.

Attomarker iPhone-based blood testing device for diagnosis and public health monitoring, 2019

Donated by Attomarker Ltd. Object no. E2019.0261.1

FebriDx blood testing tool for diagnosing a respiratory infection, 2019

Donated by Lumos Diagnostics. Object no. E2019.0265.1

U-Sense test to detect four urinary bacterial infections, 2017

Donated by Module Innovations. Object no. 2018-481

NG-DetecTool urine, stool and blood test to detect enzymes responsible for antibiotic resistance, 2018

Donated by CEA. Object no. E2019.0263.1

Object: Bag containing cinchona bark
1777–1785



This bag of cinchona bark is from a collecting expedition ordered in 1777 by King Charles III of Spain. The story of the bark's fever-reducing qualities had travelled from Peru to Europe, and so demand was high. Led by Spanish botanists, the 11-year expedition was fraught with bad weather, illness and shipwreck.

Peru

Lent by Wellcome Collection
to the Science Museum Group

Object no. A654763

**Object: Theodore Roosevelt's
medicine chest
1900–1909**



Theodore Roosevelt, 26th president of the USA, took this medicine chest on safari to central Africa in 1909. The chest originally contained six bottles of plain and sugar-coated quinine tablets, for malaria and fevers. Four bottles remain but only two have any contents, suggesting the expedition consumed the rest.

Britain

Made by Burroughs Wellcome & Co

Lent by Wellcome Collection
to the Science Museum Group

Object no. A700000

Object: Giustiniani family medicine chest 1562–1566



Catering to every need of the Giustiniani family of Genoa in Italy, these 126 boxes and bottles contain prepared treatments and raw materials for making medicines. Wealthy enough to afford such a large item, the family probably also employed their own doctor. The chest, including its contents, weighs 37.5 kilogrammes and requires two people to carry it.

Italy

Lent by Wellcome Collection
to the Science Museum Group

Object no. A641515

Installation: Who's next, please?



Gibson & Son's pharmacy dispensed medicines for 140 years to the people of Hexham in Northumberland, northern England. Step inside to see many of the original fixtures and fittings from the family-run business and discover the numerous services a typical pharmacy offered to people in 1911. As well as providing medical advice, eyesight tests and a spectacles service, pharmacists dispensed their own formulas for medicines, doctors' prescriptions, and sold ready-made medicines.

Hear imagined scenes between Mr Gibson and his apprentice, Alice, and three of their customers. Explore the tools of the pharmacist's trade from pestles and mortars to poisons and pill cutters.

Pick up a transcript inside the pharmacy.

Objects: Promoting thalidomide 1960s



Licensed as Distaval in Britain in 1958, thalidomide was advertised as a risk-free sedative and antinausea drug by the company Distillers. Its devastating effects on babies were discovered in 1961, and thalidomide was withdrawn from over-the-counter sale that year. It was later learnt that thalidomide affected fetuses between the 20th and 36th day of pregnancy. The effects depended on which of the 16 days the thalidomide was taken.

Distaval thalidomide tablets, 1958–1962
Science Museum Group
Object no. 1988-243/29

Object: The other side to thalidomide 2018



Despite thalidomide's effects in pregnancy, it can help treat leprosy and some cancers. It is prescribed under strict controls in some countries with people being informed of the risks and given guidelines on contraception. Earlier packaging included a photograph of a thalidomide-affected child. It was also trialled as an HIV treatment in the 1980s. Uninformed use of thalidomide in South America, however, has resulted in a new generation of children affected by the drug.

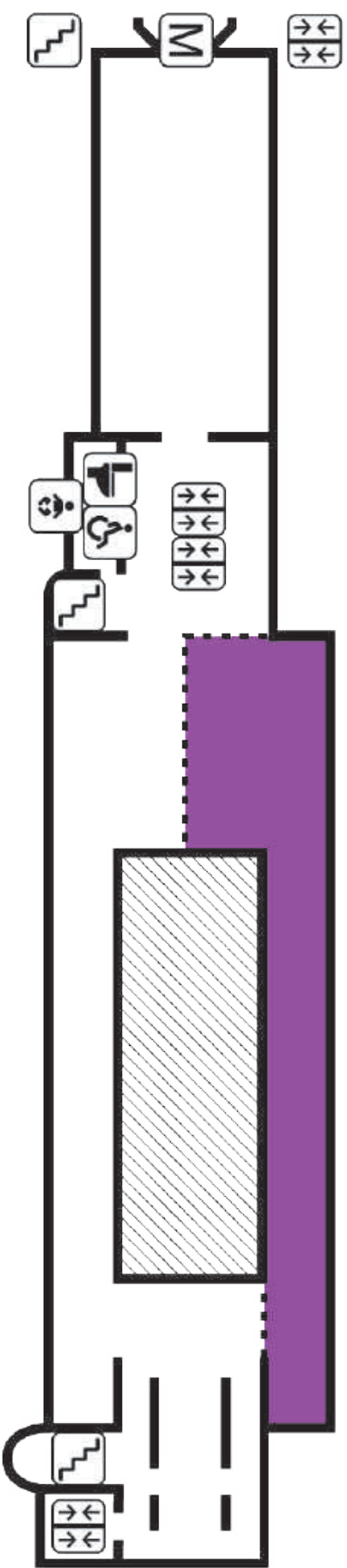
Facsimile

Donated by Celgene Europe BV

Science Museum Group

Object no. E2018.0951.1

Medicine: The Wellcome Galleries overview map



Medicine and Treatments:
The GSK Gallery

- | | | | |
|---|-------------|--|--------------------|
| — | Wall | | Lift |
| | Atrium | | Toilets |
| | Main museum | | Accessible toilets |
| | Stairs | | Baby changing |