



Hospitals in Dundee

Dundee has long been one of Scotland’s principal medical centres. In medieval times it had at least five hospitals, but only one survived until the late 18th century. The first Dundee Infirmary opened at King Street in 1798, but the rapid rise in population with the jute industry led to the much larger Dundee Royal Infirmary being built on Barrack Road in 1855. Further hospitals were opened at Kings Cross in 1890 for infectious diseases, the Eastern (later Maryfield) in 1893 for the sick poor, and the Royal Victoria in 1897 for incurables. The main hospital in Dundee is now at Ninewells, opened in 1974 – the largest medical complex in the UK.

Dundee’s X-ray Pioneer



George Pirie (1863–1929) was one of the early Scottish pioneers in the application of x-rays to clinical medicine, beginning his investigations at Dundee Royal Infirmary in 1896 just a few months after their discovery by Wilhelm Röntgen. Much of his original equipment is preserved by the Tayside Medical History Museum.

Mustard Oil used by Dr Pirie to ease the pain in his hands after x-raying – they later had to be amputated. Courtesy of Tayside Medical History Museum.

Tackling Diabetes

The current epidemic of diabetes is being met head-on in Dundee, where the already hold better information and knowledge of diabetes population statistics than anywhere else in Europe. It is being addressed by the collaborative work of nearly 30 groups within the University and local health authority. Dundee has been chosen as the co-ordinating site for Generation Scotland, which aims to establish an international resource for the genetics of this and other long-term conditions.

A Century of Cancer Care & Research



In 1906 the Caird Cancer Hospital opened at Dundee Royal Infirmary. Today Dundee remains at the cutting edge of cancer research with ongoing clinical innovations in surgery, radiotherapy and trial therapies.

Key scientific discoveries and advances include the p53 cancer gene, studies of the intricate clockwork inside cancer cells and the implementation of cancer screening. In 2003, Dundee’s Maggie’s Centre for cancer care opened at Ninewells, in a landmark building designed by Frank Gehry.



Dundee Royal Infirmary

Medical Collections in Dundee & Tayside

University of Dundee Museum Services

University of Dundee, Dundee, DD1 4HN

The museum collections hold a variety of objects relating to teaching in the Medical and Dental Schools as well as the departments of anatomy and physiology. These include instruments, teaching charts and wax models. Most are held in storage but can be viewed by appointment. Along with NHS Tayside, University of Dundee Museum Services are jointly responsible for running the Tayside Medical History Museum.

T: 01382 384310 | E: [museum@dundee.ac.uk](mailto:museum@dundee.ac.uk)  
[www.dundee.ac.uk/museum](http://www.dundee.ac.uk/museum)



Courtesy of Tayside Medical History Museum

University of Dundee Archive Services

University of Dundee, Dundee, DD1 4HN

The archives’ collections relating to medical history include records of NHS Tayside; archives relating to teaching and research in medicine from the University and local hospitals; papers of local organisations and individuals with medical connections; and archives relating to medical missionaries who practised overseas.

T: 01382 384095 | E: [archives@dundee.ac.uk](mailto:archives@dundee.ac.uk)  
[www.dundee.ac.uk/archives](http://www.dundee.ac.uk/archives)

Tayside Medical History Museum

Ninewells Hospital & Medical School, Dundee

The museum holds one of the most significant medical collections in Scotland, featuring a wide range of material on the history of medical practice throughout the region, as well as a general history of Scottish medicine. Regular exhibitions are held in various sites around the hospital – please contact the museum for further information.

T: 01382 384310 / 633901 | E: [museum@dundee.ac.uk](mailto:museum@dundee.ac.uk)  
[www.dundee.ac.uk/museum/medical.htm](http://www.dundee.ac.uk/museum/medical.htm)

Angus Archives

Hunter Library, Restenneth Priory, by Forfar, DD8 2SZ

The archive contains medical documents relating to the county, including reports by local medical officers, parish medical certificates and related family papers.

T: 01307 468644 | E: [angus.archives@angus.gov.uk](mailto:angus.archives@angus.gov.uk)  
[www.angus.gov.uk/history](http://www.angus.gov.uk/history)

Perth & Kinross Council Archive

AK Bell Library, York Place, Perth, PH2 8EP

The archive contains medical documents including records of Perth District Asylum, Hillend Fever Hospital and Strathmore Hospital, and reports of local medical health officers.

T: 01738 477012 | E: [archives@pkc.gov.uk](mailto:archives@pkc.gov.uk)  
[www.perthshire.com/residents/Arts+and+Culture/Archives](http://www.perthshire.com/residents/Arts+and+Culture/Archives)



Courtesy of Tayside Medical History Museum

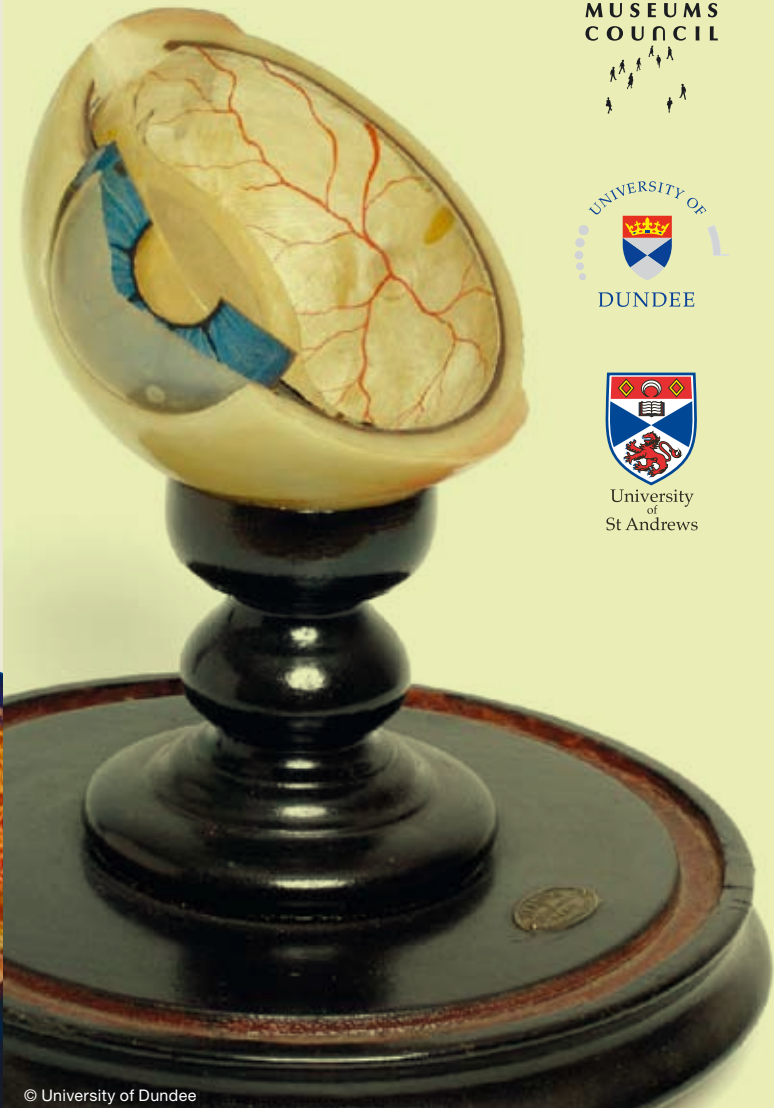
Scotland & Medicine: Collections & Connections is a partnership formed to promote Scotland’s outstanding museum, gallery, archive and library collections that have connections with medicine, health and the body.  
[www.scotlandandmedicine.com](http://www.scotlandandmedicine.com)

[www.anatomyacts.co.uk](http://www.anatomyacts.co.uk) is an online exhibition designed to complement the 2006/07 touring exhibition *Anatomy Acts: How We Come to Know Ourselves*. The website features exhibits and learning resources for primary and secondary school teachers.

Visit the website to find out where the exhibition is currently on display and download the teaching resources.

Scotland & Medicine: Collections & Connections is supported through the Regional Development Challenge Fund, funded by the Scottish Executive and administered by the Scottish Museums Council.

Scotland & Medicine  
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Fife & Tayside  
History of Medicine



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# Fife & Tayside History of Medicine

The regions of Fife and Tayside are rich in medical history. Scotland's significant world position in medical research is clear from the achievements of this area alone.

This leaflet describes some of the most significant medical achievements and personalities from this area and tells you where you can go to see medical collections in local museums and archives.

Read on to discover more about the area whose medics dissected the first elephant and discovered vaccination; and where medical boundaries continue to be pushed back through pioneering work in tackling diabetes and cutting-edge cancer research.

## Some Discoveries and Inventions

- The first public mental health institution in Britain opened on Barrack Street in Montrose in 1781, thanks to the efforts of a local woman, Mrs Susan Carnegie, who was shocked that the mentally ill in Montrose were being imprisoned without proper care. In the 1850s it moved to a new site outside the town, and has been known as Sunnyside Royal Hospital since 1962.
- The polygraph (used as the basis for modern-day lie detectors) was invented by Sir James Mackenzie (1853–1925), born near Scone. A celebrated heart specialist, he founded the influential Mackenzie Institute of Clinical Research in St Andrews.
- In 1952, while working at Dundee Royal Infirmary, Dr James Riley and Geoffrey West changed our understanding of allergic reactions when they discovered that the mast cell granule is the major source of histamine in the body.

## ST ANDREWS & FIFE



### Medical Teaching in St Andrews

#### Medieval Beginnings

In 1413 the University of St Andrews was granted the power to examine candidates for Masterships and Doctorates in Medicine, as well as Arts, Theology, Canon Law and Civil Law. However, there was no organised scheme of teaching which could properly be called a 'Medical School' until the late 19th century.

#### Famous Alumni

In the 17th and 18th centuries medical degrees were awarded to candidates without them attending the University upon testimonials from 'eminent practitioners' as to the candidates' suitable character, education and experience. John Arbuthnot (degree awarded 1696), author of *John Bull*, and Edward Jenner (1792), discoverer of vaccination, were both given degrees under this system.

#### A Pioneering Woman

Elizabeth Garrett Anderson, the first woman to qualify as a medical practitioner in Britain, enrolled as a student at the University of St Andrews in 1862. However, as women were not then allowed to study at the University, she was dismissed, despite the support of her professors.

#### Establishing a Medical School

In 1897 University College Dundee became a part of the University of St Andrews and in 1898 the Conjoint Medical School was established at Dundee. The union ended in 1967, with the establishment of the University of Dundee. From 1970, pre-clinical medicine only was taught in St Andrews (with students completing their clinical training at the University of Manchester). In 2004, the University of St Andrews created a new Faculty of Medicine, with a new curriculum leading to Honours degrees in Medical Science.

#### 21st Century Achievements

Cancer research is a particular specialism of the University of St Andrews. In 2006 scientists from the Universities of St Andrews and Dundee won a major grant to develop a new technology for delivering cell-by-cell medical treatments. The researchers hope to develop new, non-invasive surgical techniques using ultrasound and laser technology. Preliminary research achieved a breakthrough in 2005 in understanding how cancer cells can be targeted and destroyed by a single pulse of ultrasound energy using an approach developed from military technology.



Wax model of hand

© University of St Andrews

### Medical Collections in St Andrews & Fife

#### University of St Andrews Museum Collections

*St Andrews University Library, North Street, St Andrews, KY16 9TR*

The Anatomy and Pathology Collection contains specimens as well as anatomical models, drawings and engravings and some equipment. It is still used today for teaching by the School of Medicine and access to it is restricted. Please contact the museum office for more information.

**T: 01334 462417 | E: [hcr1@st-andrews.ac.uk](mailto:hcr1@st-andrews.ac.uk)**  
**[www.st-andrews.ac.uk/muscoll](http://www.st-andrews.ac.uk/muscoll)**

#### University of St Andrews Library

*St Andrews University Library, North Street, St Andrews, KY16 9TR*

The principal collections relating to medicine are the library of Sir John Wedderburn (1599–1679) who was physician to Charles I, and the Simson collection, the library of the first two Chandos Professors of Medicine (collectively 1722–70). The manuscript collections include the papers of H G Callan (1917–93), pioneer in genetics and DNA.

**T: 01334 462339 | E: [speccoll@st-andrews.ac.uk](mailto:speccoll@st-andrews.ac.uk)**  
**[www.st-andrews.ac.uk/specialcollections](http://www.st-andrews.ac.uk/specialcollections)**

#### St Andrews Preservation Trust Museum

*North Street, St Andrews, KY16 9PW*



© St Andrews Preservation Trust

This local history museum features a reconstructed chemist's shop with bottles, bed pans, pills and ointments – many of them made locally. There is also material on display from a local dentist dating back to the 1830s, including a work bench, jewellers flame, anvil and hammer, tools and dentures.

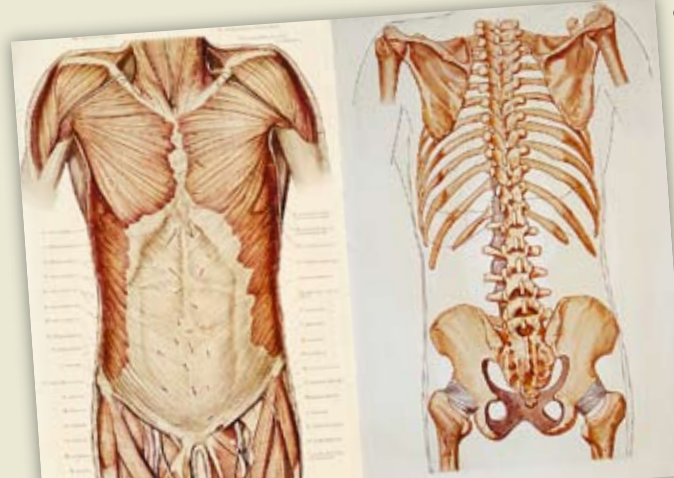
**T: 01334 477629 | E: [curator@standrewspreservationtrust.org](mailto:curator@standrewspreservationtrust.org)**  
**[www.standrewspreservationtrust.org](http://www.standrewspreservationtrust.org)**

#### Crail Museum & Heritage Centre

*62-64 Marketgate, Crail, KY10 3TL*

This small local history museum provides an insight into the past life of the ancient Royal Burgh. It holds material on the history of local medical practitioners and their work, the introduction of the NHS, the District Nurse and the local pharmacy.

**T: 01333 450869 | E: [crailmuseumtrust@tiscali.co.uk](mailto:crailmuseumtrust@tiscali.co.uk)**  
**[www.crailmuseum.org.uk](http://www.crailmuseum.org.uk)**



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## Pioneering People

The first dissection of an elephant took place in 1706 by **Patrick Blair** (born Lethendy, Perthshire). The elephant was being exhibited around the country and died on its way to Dundee.

**Sir James Wylie** (1768–1854), born in Kincardine, Perthshire, travelled to St Petersburg and became chief medical inspector to the Russian army and ultimately physician to the Tsar himself. As director of the Russian War Ministry he founded training academies for military surgeons and earned an international reputation.

Insulin was co-discovered by **John James Rickard Macleod** (1876–1935) – born near Dunkeld. While based in Canada he worked with F G Banting to extract the drug and prove its value in the control of diabetes. For this work he and Banting shared the Nobel Prize in 1923.

**Margaret Fairlie** (1891–1963) became the first female University professor in Scotland when she was awarded the Chair of Midwifery at University College Dundee in 1940.

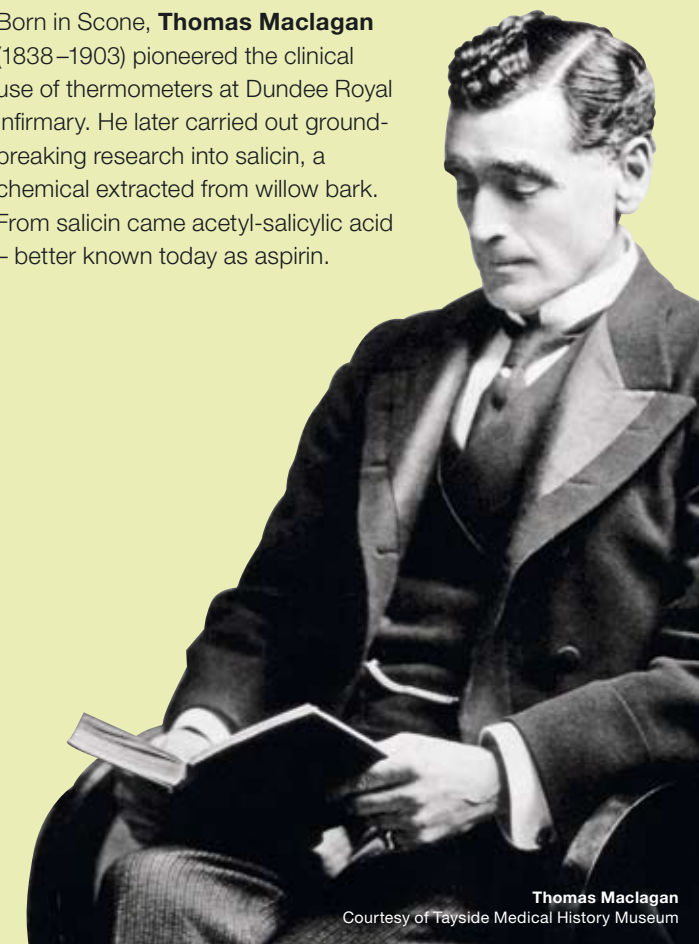


© University of Dundee

The beta-blocker Propranolol was invented by an ex-medical student of Dundee, **Sir James Black** (born 1924). It is considered to be one of the most important contributions to clinical medicine and pharmacology of the last century. He served as Chancellor of the University of Dundee from 1988–2006.

The pioneer of keyhole surgery, **Sir Alfred Cuschieri**, was Professor of Surgery at the University of Dundee from 1976–2003. He has given his name to the Cuschieri Skills Centre, recognised as one of the most innovative research and training facilities in Europe.

Born in Scone, **Thomas Maclagan** (1838–1903) pioneered the clinical use of thermometers at Dundee Royal Infirmary. He later carried out ground-breaking research into salicin, a chemical extracted from willow bark. From salicin came acetyl-salicylic acid – better known today as aspirin.



Thomas Maclagan

Courtesy of Tayside Medical History Museum



Sunnyside Royal Hospital