History of the Chair of Clinical Surgery

Eleven people have held the Chair of Clinical Surgery since its establishment in 1802.

They are, in chronological order:

- Professor James Russell
- Professor James Syme
- Lord Joseph Lister
- Professor Thomas Annandale
- Professor Francis Mitchell Caird
- Sir Harold Stiles
- Sir John Fraser
- Sir James Learmonth
- Sir John Bruce
- Sir Patrick Forrest
- Sir David Carter

Introduction

At the end of the 18th century surgeons had been advocating that the teaching of surgery in the University of Edinburgh was of sufficient importance to justify a chair in its own right.

Resistance to this development was largely directed by Munro Secundus, who regarded this potentially as an infringement on his right to teach anatomy and surgery. James Russell petitioned the town council to establish a Chair of Clinical Surgery and, in 1802, he was appointed as the first Professor of Clinical Surgery. The chair was funded by a Crown endowment of £50 a year from George III in 1803.

James Russell 1754-1836

James Russell followed his father of the same name into the surgical profession. His father had served as deacon of the Incorporation of Surgeons (Royal College of Surgeons of Edinburgh) in 1752. The younger James Russell was admitted into the Incorporation in 1774, the year before it became the Royal College of Surgeons of the City of Edinburgh.

Prior to his appointment to the Regius Chair of Clinical Surgery, Russell was seen as a popular teacher attracting large classes in the extramural school. Though he was required by the regulations of the time to retire from practice at the Royal Infirmary at the age of 50, he continued to lecture and undertake tutorials in clinical surgery over the next 20 years. An early paper of his in 1803 is one of the earliest descriptions of direct inguinal hernia.

Russell retired from the Chair of Surgery in 1833 at the age of 79 but only on the condition that his successor should pay him £300 a year for life as seemed to be custom at the time. Of the contenders to follow him in the Chair at the time, Robert Liston refused to agree to pay.

Professor James Syme 1799-1870

The son of an Edinburgh solicitor, James Syme was educated at Royal High School and the University of Edinburgh. One of his early teachers was Robert Liston, whose friendship turned eventually to rivalry. He went to Paris to visit amongst others Dupuytren, and on his return reported the first successful amoutation of the hip joint

performed in Scotland. His rivalry with Liston prevented his joining the staff at the Royal Infirmary and he set up his own private hospital at Minto House in what is now Chambers Street in Edinburgh. His surgical reputation continued to grow and he was thought to be one of the first surgeons to perform excision of the tongue for cancer. Amputation through the ankle joint is a procedure that still bears his name and was first performed in 1842.

In 1833 Syme was appointed to the Regius Chair of Clinical Surgery and in 1847 moved briefly to the Chair of Surgery at University College, London in succession to Robert Liston but returned to the Chair in Edinburgh only five months later. His innovative style of teaching drew students of surgery from all over the country and one of these, Joseph Lister, was attracted to stay in Edinburgh and was appointed House Surgeon to Syme in 1854. Two years later, he married Syme's daughter.

Syme became President of the Royal College of Surgeons of Edinburgh in 1849 and his subsequent death in 1870 closed an exciting and innovative era which brought about great change in the practice and teaching in surgery.

Lord Joseph Lister 1837-1912

Joseph Lister succeeded to James Syme as Regius Professor of Clinical Surgery in 1869. Lister's legacy to surgery was immense. Brought up and educated in London, his interest in surgery was inspired by his being present at the first public demonstration of an ether anaesthetic in England by Robert Liston. Lister became a Fellow of the Royal College of Surgeons of Edinburgh in 1855 and was appointed House Surgeon in the Royal Infirmary and Assistant at Syme's Private Hospital in Minto Street.

In 1860 he was appointed Regius Professor of Surgery at the University of Glasgow and as a Surgeon at Glasgow Royal Infirmary. Much of his seminal work on wound infection and antisepsis was undertaken during his time in Glasgow. However, it was in Edinburgh that he went on to develop the carbolic spray which was used to disinfect the environment around the wound during operations and during dressings. He treated the catgut ligature with carbolic to reduce the problems of wound sepsis, thereby introducing chromic catgut into clinical practice.

Following his appointment to the Chair of Clinical Surgery in Edinburgh, he became the Surgeon to The Queen in Scotland for whom the use of an antiseptic technique in draining a royal abscess at Balmoral likely enhanced his reputation and provided a useful defence against his enemies. He established a large and successful surgical practice from his home in 9 Charlotte Square before he elected to move to the Chair of Clinical Surgery in King's College, London in 1877.

He was created Baron Lister of Lyme Regis in 1897 and was elected as the first surgeon to become President of the Royal Society. He was one of the twelve original members of the Order of Merit and became the only Fellow by Examination to receive the Honorary Fellowship of the Royal College of Surgeons of Edinburgh in 1905 during the quarcentenary celebrations of the College. Lister became a Freeman of the cities of London, Glasgow and Edinburgh.

Thomas Annandale 1838-1907

Thomas Annandale was the son of a Newcastle surgeon for whom he served as an apprentice before undertaking his studies at the University of Edinburgh. He was appointed House Surgeon to James Syme in 1860 and subsequently became his private assistant. He was appointed to the Regius Chair in 1877. Annandale was known as a pioneer in the surgery of the knee joint and was first to describe

meniscectomy. In 1895, Annandale performed the first successful removal of an acoustic neuroma and is credited with the introduction of the pre peritoneal approach to groin hernia repair. One of his legacies included the Annandale Gold Medal which was awarded to the best undergraduate in Clinical Surgery.

Francis Mitchell Caird 1853-1926 - Francis Caird was born in Edinburgh and educated at the Royal High School in Edinburgh and at the University of Edinburgh. As an undergraduate, he served as a dresser in Lord Lister's wards and subsequently practiced and promoted the Listerian techniques of antisepsis before moving on to techniques of aseptic surgery. This, as well as his regular visits to continental surgical centres allowed him to establish his reputation as a gastrointestinal surgeon. He was appointed to the Regius Chair in 1908. He was elected President of the Royal College of Surgeons in 1912 and went on to receive an honorary degree of Doctor of Laws from the University of Edinburgh in 1920 following his retirement.

Sir Harold Stiles 1863-1946

Harold Stiles came from a family of doctors who practiced in Lincolnshire and studied medicine at the University of Edinburgh. He graduated from medical school in 1885 with first class honours and as Ettles Scholar. He served as House Surgeon to Professor John Chiene, was Demonstrator in Sir William Turner's University Department of Anatomy and was appointed Assistant in Charge of Pathology in the surgical laboratory established by Professor Chiene. He achieved international recognition through his research studies on the anatomy of the breast and pathology of breast cancer. A period of six months training in Bern with Professor Theodore Kocher further established his reputation and progressed him from the practice of Listerian antisepsis to the aseptic system of surgery practiced in Bern.

Stiles' international reputation was enhanced by the quality of his clinical practice in the Sick Children's Hospital in Edinburgh. His work included the demonstration that the bovine form of the tubercle bacillus was the frequent cause of tuberculosis of bones, joints and cervical lymph nodes. He was the first surgeon to treat extraversion of the bladder by transplantation of the ureter into the sigmoid colon and, although Ramstedt of Munster has given his name to the procedure of pyloro-myotomy for congenital hypertrophic pyloric stenosis, it was Stiles who undertook this operation a year earlier, although his results were only published two years later in 1912.

During the First World War, he was responsible for the secondary and tertiary care of battle casualties evacuated to the Military Surgical Division established in Bangour Hospital under his charge. His achievements during that time were rewarded by a knighthood and the following year (1919) he was appointed to the Regius Chair of Clinical Surgery. He became truly established as an outstanding teacher and surgical craftsman. He was appointment surgeon to His Majesty King George V in Scotland and served as President of the Royal College of Surgeons of Edinburgh from 1923-1925.

Sir John Fraser 1885-1947

John Fraser came from a farming family in Tain and following his education there undertook his medical studies at the University of Edinburgh, graduating with honours in 1907 and gaining the Class Medal in Clinical Surgery. He served as House Surgeon and Assistant Surgeon in private practice and at Chalmers Hospital to Sir Harold Stiles. It was his research with his mentor on bone and joint tuberculosis in children which established his surgical reputation.

Fraser served with the Royal Army Medical Corps in France, and was awarded the Military Cross after being wounded in 1916. This personal experience of injury may have enhanced his surgical reputation through important original observations on the path of physiology of traumatic shock, his work on blood transfusion and plasma substitutes and by his work on penetrating wounds of the abdomen.

John Fraser succeeded Sir Harold Stiles as the Regius Professor of Clinical surgery in 1927. He was known as an inspiring teacher, a diagnostician and operating surgeon. He developed a great interest in cardiac surgery and was the first surgeon in Scotland and only the second in the British Isles to undertake ligation of a patent ductis arteriosis. He received international recognition through the fellowship of various surgical associations and was made honorary fellow of the Royal Australasian and American Colleges of Surgeons before being appointed surgeon to His Majesty the King in Scotland in 1935. He was made Knight Commander of the Royal Victorian Order in 1937 and was created a Baronet in 1942. He served briefly as Principal of the University of Edinburgh before his untimely death in 1947.

Sir James Learmonth 1895-1967

Sir James Learmonth was a remarkable individual who occupied, uniquely, both the Chair of Systematic Surgery and the Regius Chair of Clinical Surgery simultaneously for a period of ten years at the University of Edinburgh.

James Learmonth was born in Gatehouse of Fleet and received his education at Kilmarnock Academy and at the University of Glasgow. His medical studies were interrupted when he served as a junior officer in the King's Own Scottish Borders during the First World War but on his return graduated with honours with the Brunton Memorial Prize. He served as assistant to the Regius Professor of Surgery in Glasgow and undertook a Rockefeller Fellowship at the Mayo Clinic, where he worked with Dr Alfred Adson in the neurosurgical service.

He returned to Scotland briefly before he was invited by Dr W J Mayo to join the staff at the Mayo Clinic as a neurosurgeon and was appointed Associate in Surgery in the University of Minnesota. He developed his international reputation as a researcher for his work on the innervation of the bladder and on the physiology of micturition, along with the surgery of the sympathetic nervous system and its role in the treatment of peripheral vascular disease.

He served as Regius Professor of Surgery in the University of Aberdeen for a seven year period from 1932, was appointed Surgeon to His Majesty the King in Scotland in 1935 and, four years later, succeeded Sir David Wilkie as Professor of Systematic Surgery at the University of Edinburgh.

In 1946, he was appointed to the Regius Chair of Clinical Surgery and focused his energies on the establishment of clinical units dedicated to the emergence of surgical specialties and ensured the academic integration within the academic surgical units. He was responsible for the introduction of Saturday morning meetings at which all surgical units in the Edinburgh area were represented. This served as the earliest example in the United Kingdom of systematic surgical audit and was the origin of the renowned Lothian Surgical Audit.

He undertook a lumbar sympathectomy on King George VI in 1949 and, in his immediate post operative period, the King bestowed upon his surgeon the accolade of Knighthood of the Royal Victorian Order (KCVO). He was made a Chevalier of the Légion d'honneur in 1951 and awarded honorary fellowships of four surgical

colleges, honorary doctorates to four universities and honorary membership of many national and international surgical societies.

Sir John Bruce 1905-1975

John Bruce was a native of Dalkeith and graduated with honours from the Medical School at the University of Edinburgh in 1928. He served as the Assistant Surgeon to Ian Aird but, at the outbreak of war in 1931, joined the Royal Army Medical Corps, serving in Norway and South East Asia. He was made a Commander of the Order of the British Empire for his wartime service and, on his return to Edinburgh in 1946, founded the combined medical and surgical gastrointestinal unit at the Western General Hospital. This innovative multidisciplinary approach focused primarily on the management of peptic ulceration and inflammatory bowel disease and established his reputation internationally.

He was appointed to the Regius Chair of Clinical Surgery in 1956 and became an international figure fostering links with the United States, Canada and the Commonwealth. With Ian Aird and Dr William Hinton of New York, he founded the James IV Association of Surgeons of which he subsequently became President. Sir John Bruce received numerous international accolades, was knighted in 1963 and was appointed as Surgeon to The Queen in Scotland in 1966.

Sir Patrick Forrest 1923-

Andrew Patrick McEwen Forrest was born in Lanarkshire and educated at Dundee High School and the University of St Andrews. Upon his graduation in 1945 and two years as a Surgeon Lieutenant in the RNVR, he undertook his surgical training at St Andrews, at Dundee Royal Infirmary and as a Foundation Fellow at the Mayo Clinic. He served as Lecturer and Senior Lecturer to Sir Charles Illingworth, University Department of Surgery at the Western Infirmary in Glasgow.

His early experimental research into the pathophysiology of peptic ulceration was rewarded with a Master of Surgery with Honours and a Gold Medal. He received a Doctorate of Medicine with similar distinction for his work on pituitary ablation in the treatment of advanced breast cancer, Patrick Forrest was appointed to the Chair of Surgery at the Welsh National School of Medicine in 1962, establishing research laboratories which continued to support his research in gastric physiology and breast disease.

He was appointed to the Regius Chair of Clinical Surgery in 1971, establishing Edinburgh as one of the leading international centres in breast disease research and treatment. He established a multi-disciplinary approach to the treatment of breast cancer, establishing an extensive research programme from the endocrinology of tumour to the screening of healthy women. This led to his inaugurating the Breast Screening Programme in the United Kingdom in 1998. He led and participated in many clinical trials designed to identify the optimal combination of treatments of breast cancer at every stage of its development.

He established the stand-alone breast unit at Longmore Hospital and balanced his clinical leadership roles with those of the Chief Scientist post to which he was appointed in 1981. His achievements in establishing one of the strongest academic surgical units in the country included the award of the McKeown and Lister Medals by the Royal Colleges of Surgeons of Edinburgh and England respectively. He was knighted in 1986 for his services to surgery.

In his retirement Sir Patrick Forrest continued to be busy, spending a year in the National Cancer Institute and two years in Malaysia as Associate Dean of Clinical

Studies in the International Medical College in Kuala Lumpur. As an Emeritus Professor to the University of Edinburgh his wise counsel has been in considerable demand.

Sir David Carter 1940-

David Craig Carter was a native of Cumberland and undertook his undergraduate medical studies at the University of St Andrews in Dundee. Following his graduation from St Andrews in 1964, he moved to the Academic Surgical unit of Sir John Bruce before his appointment to the British Empire Cancer Campaign Research Fellow in the same department. His early research in Edinburgh, at Makerere University, Uganda with Professor Sir Ian Macadam and as a Wellcome Trust Senior Lecturer at the Council for Ulcer Research and Education at the University of California with Dr Mort Grossman, secured his reputation as an academic surgeon of the highest standard. He was appointed St Mungo Professor of Surgery at the University of Glasgow in 1979, from which base he developed a national and international reputation in the management of complex pancreaticobiliary disease. He established a reputation as an outstanding writer and speaker, serving as editor of a number of highly successful undergraduate and postgraduate surgical textbooks.

He succeeded Sir Patrick Forrest to the Regius Chair of Clinical Surgery in 1988 and established an academic surgical unit which became a fertile environment for both clinical and basic science research relevant to the increasing specialisation within general surgery. His national and international reputation was evidenced by serving on the editorial board of several medical and surgical journals and as Co-Editor of the British Journal of Surgery from 1986-1991. He served as President to the Surgical Research Society, the Association of Surgeons of Great Britain and Ireland and the International Hepatico Biliary and Pancreatic Association. He chaired the Scottish Council for Postgraduate, Medical and Dental Education and was appointed Surgeon to Her Majesty the Queen in Scotland.

He was created a Knight Bachelor in recognition of his major contributions to surgery in 1996 and was appointed Chief Medical Officer for Scotland in 2002. Of his many achievements during his tenure of this post, he led the Acute Services Review, which delivered a template for reform in the provision of healthcare in Scotland. He served as a member of the Court of the University of St Andrews from 1997-2000 and returned to the University of Edinburgh in 2001 as Vice Principal, during which time he was instrumental in securing the funding of the New Research Institute (now the Queen's Medical Research Institute) at the Little France site of the Royal Infirmary.

Sir David Carter has continued, since his retirement as Vice Principal in 2003, to have an impact on clinical practice and research. He served as Honorary President to the British Medical Association and is Chairman of the Scientific Committee of Cancer Research UK, Vice President of the Royal Society of Edinburgh and Chairman of the PPP Foundation, which subsequently established a programme of clinical surgical scientists in the United Kingdom.