This exhibition celebrates the re-opening of the J T Wilson Museum after its recent refurbishment. The curators and architects have combined forces to provide a striking modern environment for anatomical study which does justice to the collection built up over more than a century by our anatomy staff and students. With the opening of the medical school and the arrival of Professor Anderson Stuart, anatomy took a central place in our medical curriculum. In 1890, James Thomas Wilson was appointed as Foundation Challis Professor of Anatomy. Since Anderson Stuart’s time there have been a series of Professors of Anatomy, each who have made significant contributions to Anatomy within the University and elsewhere. Their biographies and achievements are depicted alongside a photo gallery of the first 60 years of prosectors.

Enquiries: Dr Lise Mellor 9036 3366.

Special thanks go to staff of the Anatomy Department and the Digital and Print Media Office for their assistance with this exhibition.
Professor Sir Thomas Peter Anderson Stuart (1856—1920)

Foundation Professor of Anatomy and Physiology 1883–1890
Professor of Physiology 1890–1920
MD ChM HonLLD (Edin) HonDSc (Durham) MD (Melb)
On 13 June 1856, the Faculty of Medicine formally came into being when the Senate of the University of Sydney appointed a board of examiners. The foundation board included John Smith (Professor of Chemistry and Experimental Physiology) and eight medical practitioners from Sydney. Professor Smith was appointed as Dean of the Faculty.

For the first 27 years the Faculty of Medicine served as an examining board only, approving the award of bachelor’s and doctor’s degrees. It was not until 1882 that the government agreed to finance a medical school. The position of Dean of the Faculty was advertised and Thomas Peter Anderson Stuart was the successful candidate. In 1883, aged 27, he arrived from Scotland to take up the role of Dean and Foundation Professor of Anatomy and Physiology.

Anderson Stuart had been an exceptional student, coming first in his year (1880) with First Class Honours, winning both the gold medal and the Ettles Scholarship. His application for the post of Professor of Physiology and Anatomy included references from many eminent medical worthies, such as Professor (Lord) Joseph Lister, who testified:

Mr Anderson Stuart’s studentship in the University of Edinburgh was marked by unusual brilliancy; and if there were any departments in which he shone more conspicuously than in others, they were those of Anatomy and Physiology. In these he not only took the highest class honours and other distinctions, but showed his thorough love for the sciences concerned, by working for two years as Prosector to Professor Turner, and also as Demonstrator to Professor Rutherford.

Professor Joseph Lister, 29 May 1882

With the appointment of Anderson Stuart, the University began to build premises for the Medical School. The ‘Cottage’ was built in three weeks at a cost of £842 and 15 shillings. Anderson Stuart arrived and began teaching in March 1883, providing daily lectures to four male students, although the building was incomplete.

The ‘Cottage’ had an iron roof that was supported by a wooden trestle, two chimney stacks, four windows on each of its four sides, and central doors in the front and back.

Anderson Stuart’s workshop, c1883.

The fact that anatomical work could proceed in the Medical School at all was due to the passing of an Anatomy Act two years earlier. The first of these acts (44 Victoria No. 25) had been promoted in the NSW Legislative Council by Arthur Renwick, then a Fellow of Senate. The original act was proclaimed on 5 April 1881. It was entitled An Act to authorise the establishment of Schools of Anatomy and to regulate the practice of Anatomy therein.
The Act allowed the government to approve schools, grant licences, and appoint inspectors, who were required to make quarterly returns of cadavers to the Registrar General. There were conditions under which bodies could be acquired, final interment was specified, and dissection had to be conducted in ‘an orderly and decent manner’. Penalties were laid down of up to three months imprisonment or a £50 fine for breaches of the regulations.

In the Sydney Medical School two anatomy courses were offered: General and Descriptive Anatomy, and Regional and Surgical Anatomy. General Anatomy was synonymous with Histology and covered the structure of the body in a non-topographic way. In Surgical Anatomy lectures the structures of the body were:

Dissection was a by-law obligation from the start, involving two hours per day during the Lent and Trinity terms of second and third year. In these periods:

Anderson Stuart had no trained assistants and only a bush coach-driver employed to handle the dead bodies. He injected arsenic into the bodies to preserve them, according to a formula he had brought from Edinburgh. Cadaver storage was a problem when it rained as the cottage was very damp inside. On one occasion the bodies became green with mould and had to be buried without being dissected.

During 1883 eleven bodies were dissected. Work was already in progress towards establishing a museum of pathology and anatomy with the purchase of glass cases, glass jars and a quarter cask of spirit. Anderson Stuart encouraged “well-wishers of the University” to donate interesting and rare specimens of normal or morbid anatomy.

Although Anderson Stuart was not entirely in favour of women studying medicine, his practices with respect to women and dissection were ahead of their time. In 1886 he allowed Dagmar Berne (the first woman to enrol in Medicine) to perform dissections alongside male students. She was also permitted to perform a dissection of a male perineum in private, as a concession to her modesty.

In 1883, Senate authorised Anderson Stuart to employ a curator for the Anatomy Department, at a salary of £150 per annum for three years. John Shewan, who had been lecture attendant to Anderson Stuart’s own teacher of Physiology at Edinburgh University joined the department as Anderson Stuart’s ‘factotum’ (general servant). Shewan was joined firstly by Kenneth McRae as ‘anatomical laboratory boy’, then Louis Schaeffer in 1886. Shewan worked alongside Anderson Stuart for 28 years. His notebook detailing the apparatus required in Anderson Stuart’s lectures is held in the University of Sydney’s Rare Books collection. Schaeffer was to serve the department for 43 years.
In July 1883, Alexander MacCormick arrived from Scotland to assume part of the teaching load. In the first year of medical studies (the second year of the medical course), short courses and demonstrations were held in Comparative Anatomy, Botany, and Zoology.

The increase in numbers of medical students during the 1880s led to a Senate agreement on the splitting of MacCormick’s demonstrating duties. MacCormick became Demonstrator in Physiology and James Graham was appointed Demonstrator in Anatomy. James Thomas Wilson joined the staff as Demonstrator in Anatomy in 1887. All were contemporaries of Anderson Stuart in Edinburgh.

Anderson Stuart began pressing for funds to construct a new Medical School building as early as 1885. When the money was granted Anderson Stuart used it to lay the foundations of what was to be a much grander building than the one Senate envisaged.

There was generous provision for anatomy. In the basement was a large cellar complex with an injection room. Both of these areas are still in use for cadaver processing and storage, as is the service lift shown on the original plan. A large museum was planned for the ground floor. On the first floor, provision was made for a private office and adjoining laboratory for Professor Anderson Stuart. The Dissecting Room was fitted with 18 sturdy wooden tables with marble-slab tops. Life-size classical plaster casts posed on plinths round the room and rows of anatomical prints hung from the picture rail.

The Dissecting Room had an adjoining lavatory, urinal, and racks for hats, cloaks and umbrellas. Next to this public area was a private room for the Demonstrator in Anatomy. Opposite the Demonstrator’s room was the Prosectory. These facilities were supplemented by a lecture theatre, the Vesalian, which the Anatomy Department could regard as its own.

In 1889 Anderson Stuart relocated to the new Medical School (now called the Anderson Stuart Building). Cadavers were carried across campus from the Cottage to the new building at night by the ‘laboratory boy’ Louis Schaeffer and the University Caretaker, and other items were transported by the University cart.

Anderson Stuart’s great vision for the Sydney Medical School was manifest in his ambitious curriculum. His material legacy is the Anderson Stuart Building. The construction of such grand premises has provided for cohorts of medical students in far greater numbers than the students of his day. At the time, his plans were considered folly by some, but in retrospect his foresight has been proved correct.

Although dedicated to the development of the faculty, Anderson Stuart never quite abandoned his scholarly investigations into the relation between the structure of the larynx and the production of speech. He remains worthy of the praise that was lavished on him by his Edinburgh referees for his early academic achievements; his seminal description of the anatomical abnormalities of the popliteal artery associated with gangrene of the lower limb is still quoted in current textbooks of vascular surgery more than a century after publication.
In the same year, Anderson Stuart presented a memorandum to Senate requesting that Anatomy be removed from his direct responsibility. In the memorandum he says:

The gain to the University from such a change is manifest. The reputation of its degrees would be greatly enhanced, for no medical school can be considered fully equipped in which two subjects are taught by the one man . . . The experience I have had of the work of the present Demonstrator [Wilson] fully justifies the anticipation I have of his success . . . In regard to Dr [James Thomas] Wilson’s fitness for the office of Professor of Anatomy there can be no question; he is a good man and an excellent teacher of Anatomy, esteemed and liked by his colleagues and pupils.

James Thomas Wilson was appointed to the newly formed Challis Chair of Anatomy in 1890 and Anderson Stuart retained the Professorship of Physiology until his death thirty years later.
Professor James Thomas Wilson (1861–1945)
Foundation Challis Professor of Anatomy 1890–1920
MB ChM (Edin) MA FRS
James Thomas Wilson, a Scot, received his early education from his schoolmaster father and the medical naturalist, Dr Thomas Grierson. He developed an early interest in natural history and was torn between this and medicine but entered medicine at Edinburgh University in 1879. He graduated with second-class honours in 1883, having taken a medal in Botany. After a short session as Resident House Surgeon at the Royal Infirmary, Edinburgh, he spent a year as a ship’s surgeon in a far eastern cargo trader. During 1885 and 1886 he was a demonstrator in Professor Sir William Turner’s Department of Anatomy in Edinburgh, the most prestigious anatomy department in Great Britain.

Wilson was offered an appointment as Demonstrator in Anatomy by Anderson Stuart in 1887, and came to Sydney to take up the position. Three years later, Anderson Stuart appointed Wilson to the Foundation Challis Chair of Anatomy.

Like Anderson Stuart, Wilson modelled his department on that of Edinburgh, with an emphasis on comparative anatomy. He taught the subject as a biological science, placing great importance upon museum techniques and dissection. Wilson chose the best dissection students from third year and appointed them as demonstrators and prosectors to provide high quality specimens for the Museum of Human and Morbid Anatomy (as it was originally named). Approximately 700 specimens were derived in this manner. Photographs dating back to 1903 show that there were usually four to six prosectors appointed each year.

The appointment of prosectors enabled the accumulation of specimens for the Museum of Human and Morbid Anatomy to begin in earnest. A ‘curator’ and ‘working curator’ were employed to assist with the expansion of the museum, which had been managed thus far by a committee consisting of Wilson, Camac Wilkinson and Anderson Stuart. To support his program Wilson began employing medical graduates as part-time demonstrators, the first being Arthur Edward Mills. This was the beginning of Mill’s illustrious career. He later became Professor of the Principles and Practices of Medicine, Dean of the Faculty and served two years as Deputy Chancellor to the University.

In 1902, Wilson appointed two honorary demonstrators in addition to the paid ones: AA Palmer and Harold Skipton Stacy. From these modest beginnings, the numbers of honorary demonstrators grew so that ten years later it was usual to have five or six each year. Although unpaid, the role was esteemed and many graduates of note took up the position. As the museum was the only one of its kind in Sydney, the role also provided the opportunity for the appointee to develop their own anatomical knowledge.

In 1906 the first two female prosectors were appointed: Mary Burfitt and Elizabeth Hamilton Brown. Both women went on to be the first of three to gain first-class honours at the Sydney Medical School. It was not for another decade that two more women, Jessie Alexander and Una Fielding, were selected as prosectors. Una Fielding was an outstanding student and joined Grafton Elliot Smith’s department at University College in London as a demonstrator after she graduated. Later in her career she founded an anatomy department at the American University of Beirut.

Although Anderson Stuart relinquished development of the museum to Wilson, he remained proud of its establishment. In his address celebrating the Medical School at the University’s Jubilee, his pride in the museum was obvious when he mentioned that it “possesses 24,000 specimens and is well worthy of a visit.”
Some early honorary demonstrators of repute included Gordon Craig (1904) who was instrumental in the development of Urology in Australasia, John Windeyer (1906) who later became the first Professor of Obstetrics, and James Flashman, Honorary Demonstrator in Neurology, who later became eminent in early Neurological Pathology in Australia.

In 1907, two junior demonstrators were employed: Sir John McKelvey, who was later to become a senior surgeon and lecturer in Clinical Surgery, and Perey Walton Smith, who was to become a senior pathologist.

Wilson was passionate about creating pathways for students who excelled in dissection to gain experience and further their knowledge in the field. In 1912, he introduced the category of ‘student demonstrators’, the first being Theodore Potts, then in his fourth year of study. Potts had been a prosector in 1911 and was perhaps the most brilliant dissector the school had. His dissections still adorn the museum.

Aside from the development of the museum, Wilson’s personal achievements were remarkable. He ran the department with only a small number of technical staff yet remained dedicated to his own research. In the first decade of his appointment, Wilson’s research collaborators were principally Charles Martin and James Peter Hill. They produced 18 papers bearing Wilson’s name and undertook pioneering research and collection of anatomical specimens of Australian mammals. Their field trips are immortalised in Patricia Morison’s *The Fraternity of Duckmaloi* (1997). Many marsupial and monotreme specimens collected on these expeditions form part of the Macleay Museum collection.

Wilson also gave public lectures on aspects of anatomy. His curriculum remained stringent and failure rates for final examinations were relatively high. For example, in 1907, there were 57 failures and only 31 passes, with marks ranging from 3 to 91 per cent.

Under his leadership, the department produced some outstanding scholars of international repute. Sir Grafton Elliot Smith (MB MS 1893 MD 1895) pioneered anatomical studies of Egyptian mummies and became Professor of Anatomy at University College, London. Raymond Arthur Dart (MB MS 1893 MD 1895) undertook postgraduate training with Grafton Elliot Smith then went on to become famous for his studies of fossil man in Africa and discovering the Taung child.

During the First World War, Wilson, like many in the faculty, was actively engaged in military affairs. He was given the direction of the Military Intelligence and Censor’s Department in New South Wales. For a short time following Anderson Stuart’s death in 1920, Wilson served as Dean of the faculty. However, in the same year, Wilson was offered the Chair of Anatomy at the University of Cambridge and resigned from the University of Sydney, after service of 33 years.

In the early 1930s the morbid anatomy collection was divided. The majority of specimens transferred to become the Pathology Museum collection, with the anatomical and anthropological specimens staying in the Anderson Stuart Building. The remaining collection was renamed the JT Wilson Museum of Anatomy in 1936.
The faculty’s memory of Professor John Irvine Hunter is still fresh even 80 years after his brief tenure of the Challis Chair was tragically terminated by his untimely death, aged 26.

John Irvine Hunter graduated MB ChM from the University of Sydney in 1920 with first-class honours and the University medal. He had an outstanding student record, having won awards in each year of his undergraduate career.

Recognising both his extraordinary flair and his need for support, he was employed by the Faculty of Medicine as a prosector in 1916. His meticulously prosected specimen of a head and neck – displaying the structures around the mandible – is still on display in the Wilson Museum of Anatomy. From 1917 to 1920 he was a medical tutor at Wesley College. In 1918 he was employed as demonstrator in the department and his weekly faculty demonstrations were always delivered to a packed teaching room.

After graduating he was given leave of absence from his demonstrating duties to study in Britain, the United States of America and Canada. On his return he was promoted to Associate Professor of Anatomy in 1922 and from March 1923 he occupied the Challis Chair of Anatomy.

Hunter contributed to many diverse areas of anatomical research including a study of ovarian pregnancy, a study of the comparative anatomy of the oculomotor nucleus and, in collaboration with Sir Grafton Elliot Smith, a ‘true’ reconstruction of the Pittdown skull. In 1924 he obtained his Doctor of Medicine with first-class honours, the University medal and the Ethel Talbot memorial prize for his thesis on the forebrain of the kiwi.

Hunter’s MD thesis, entitled The forebrain of Apteryx australis together with The oculomotor nucleus of Tarsius and Nycticebus and A case of early human ovarian pregnancy is held in the University of Sydney’s Rare Books collection.

Hunter was a prolific research worker and published twenty papers in medical and scientific journals. His earlier papers were chiefly on topics in embryology and neurology, while in 1924 and 1925 his papers were mostly concerned with the innervation of muscle.

He considered that ‘voluntary’ or striated muscle fibres received nerve supply either from cerebrospinal nerve fibres or from the fibres of the sympathetic nervous system, which is generally involved in the supply of glands and of the ‘involuntary’ or smooth muscle in the walls of viscera. He thought that the plastic tonus which had been noted in voluntary muscle could be explained by sympathetic innervation: this tonus might also be the basis of spastic paralysis appearing after strokes and other diseases of the central nervous system. In consequence, Hunter and his surgical colleague Norman Dawson Royle made experimental and clinical attempts to treat spastic paralysis by sectioning sympathetic nerves.

Hunter’s work on the dual innervation of muscle fibres was of great topical interest. In October 1924 he and Royle were invited by the American College of Surgeons to deliver the John B Murphy oration in surgery in New York. Before he could return to Australia, Hunter died two months after the oration from typhoid fever, aged 26.

John Irvine Hunter was revered by his mentors, peers and students for his particularly joyous and unselfish nature, modesty and deep spirituality. His intellectual brilliance attracted much comment. His colleague, anatomist Sir Grafton Elliot Smith, said of Hunter: “Had he lived, he might have become the foremost man of science of the age.”

Scarcely his boyish years behind him cast,
Half fire of youth, Half manhood’s steady flame,
And wholly genius, his effulgent fame
Already writ upon the record – he has passed:
And, passing, placed for ever on the vast
Dim vault of knowledge, like a star, His name.
Ah, when to that young life the Reaper came,
How rich a sheaf he cut and corded fast!

“The work goes on”, you say, “Ye need not fear
The work will die “. Ah, yes, the gift goes on,
Altho’ the hand that gave be still. Alas!
What solace there? We mourn for Lycidas,
The eager happy worker who has gone,
“Dead in his prime and hath not left his peer!”

Senior Year Book (1924)
From an early age Arthur Burkitt enjoyed the natural sciences, influenced by his childhood in the bush. He came to the University of Sydney and completed first year medicine. He then transferred to science, graduating with a Bachelor of Science in 1910, before returning to his studies in medicine, and gaining a Bachelor of Medicine in 1916. A highly talented student, Burkitt received first-class honours for both degrees, was awarded the Haswell Prize for Biology, the Harris Scholarship, and finished second in his year in Medicine.

Following a residency at Royal Prince Alfred Hospital during 1917, Burkitt was attracted to an academic career and accepted a part-time post as a demonstrator in the Anatomy Department in 1918. In July of the same year he was appointed surgeon lieutenant in the Royal Australian Navy and served at sea on the Australia Station for just over a year. Afterwards he returned to work as a lecturer and demonstrator at the Anatomy Department for five years.

In 1924 he accepted a Rockefeller Grant to study at University College, London, before returning to Sydney and being promoted to associate professor. During his time in Cambridge he co-authored a seminal paper, *The facial musculature of the Australian aboriginal*, with George Henry Standish Lightoller, which was published in the Journal of Anatomy in 1926 and 1927.

In 1930–31 and 1938 he studied the comparative anatomy of the brain at the Netherlands Central Institute for Brain Research in Amsterdam. He published nineteen scholarly papers on neuroanatomy and human anthropology.

Burkitt altered the way dissection was taught in the faculty. During his tenure as Challis Professor he was instrumental in the creation of a by-law requiring students to spend at least three hours a day dissecting, during second and third year. There were no specified dissection periods and the rooms had to be adequately staffed to support student-directed learning. Burkitt subsequently appointed several paid demonstrators and up to 40 honorary demonstrators, most of whom were senior surgeons.

The 1930s saw a significant amount of research activity in Burkitt’s department. A photomicroscope and X-ray apparatus was purchased and funds from the Department of Anatomy contributed significantly to the Medical School’s animal house. From the mid-1930s Burkitt facilitated the scholarship of colleagues and students by building major collections of neuroanatomical material and scientific literature, and by providing personal encouragement.

Burkitt was instrumental in the appointment of Joseph Lexden Shellshear as Research Professor of Anatomy (1937–48). Shellshear’s work brought distinction to the department and his collection formed the nucleus of a museum of comparative anatomy and physical anthropology.

The war years were difficult for Burkitt as many of his teaching and technical staff were involved with wartime activities. Likewise, Burkitt spent his weekends serving with the Naval Auxiliary Patrol. After the war, he suffered along with the entire University as it struggled to provide for the high post-war intakes.

Burkitt resigned in 1955 after a lengthy battle with Parkinson’s disease. His immense collection of books, periodicals and reprints formed the nucleus of the Burkitt Library.

Arthur Neville St George Handcock Burkitt (1891—1959)

Challis Professor of Anatomy 1926–1955
MB BSc (Syd)

The lectures by Professor Burkitt on the Bryce-Teacher Ovum initiated us into the mysteries of our early development, and provided us with the knowledge necessary to enable us in later years to ‘go back to the embryology of the past’. Third Year Anatomy followed the same trend as Second Year – only more so. Professor Burkitt with a fresh store of ‘bread and butter’ gathered on his Continental tour, provided us with ample sustenance on our long trek from nucleus to nucleus and up and down the tracts of the central nervous system.”

Senior Year Book (1930)
Joseph Lexden Shellshear graduated in medicine from the University of Sydney in 1907. He had been an outstanding scholar, having won the Renwick Gold Medal as the best student of Practical Anatomy in 1902. Early on he demonstrated his skills for cataloguing, serving as Honorary Librarian of the University Medical Society in 1906. He completed his residency at Sydney Hospital and then entered practice in Albury.

At the outbreak of war he was appointed major to the 5th Field Artillery Brigade in the Australian Imperial Force, and was later promoted to lieutenant colonel and awarded the Distinguished Service Order for his leadership in France. In 1918 he transferred to the Australian Army Medical Corps, yet remained posted in England until 1920.

Shellshear proceeded to University College, London, on a Rockefeller Fellowship. He served as Senior Demonstrator in Anatomy in Professor Sir Grafton Elliot Smith’s department at University College with fellow alumnus Raymond Dart. Together they became deeply interested in the embryology of the nervous system and in anthropology. In 1921 they both lectured as Rockefeller fellows in the United States.

The following year, Shellshear was appointed to the Chair of Anatomy at the University of Hong Kong where he served twice as Dean of the faculty until his resignation in 1936. During his time there he undertook important work in anthropology and stimulated work in the prehistory of Sydney and Hong Kong, producing numerous distinguished publications relating to the cerebrum.

Shellshear returned to Australia in 1936 and served in the Department of Anatomy at the University of Sydney in an honorary capacity. The following year he was appointed Research Professor in Professor Burkitt’s department.

Shellshear’s major area of research interest was the anatomy of the brain and its blood supply, the peripheral nervous system, and comparative brain and skull structure. It was in this area that he published his findings about the differences between the brain structures of Chinese, African and Aboriginal people. He hoped that his work might ease ethnic tensions and assist in promoting peace in the world and in particular the Pacific.

On his retirement in 1948, Shellshear generously donated skulls, human brains, records, books and scientific papers to the department’s existing zoological and osteological collections. This became the JL Shellshear Museum of Comparative Anatomy and Physical Anthropology, named in his honour in 1959. A great deal of archival and anthropological material has since been added to the collections and it has become an important research facility for forensic and anthropological work in Australia.
Neil William George Macintosh graduated with an MB BS from the University of Sydney in 1933. He served as registrar in the neurosurgical unit and as medical superintendent at Lewisham Hospital from 1934 to 1937, then spent two years doing postgraduate study in London, Edinburgh and Budapest.

In the months of peace leading up to World War II, Macintosh worked in general practice in Newcastle and Bathurst. In 1939, he was mobilised with the Royal Australian Naval Reserve as surgeon lieutenant-commander in the Indian and Pacific oceans on the Swan and Manoora. During his war service he criss-crossed the waters between Australia and Indonesia many times, which triggered his questioning of how Australia’s Aboriginal people may have traversed these waters. This was formative for his later work on migration patterns of Indigenous Australians.

Returning to Sydney, Macintosh was influenced by Professors Shellshear (an anatomist) and Elkin (an anthropologist), to follow a career in anatomy, though he retained a growing interest in anthropology.

His thesis was titled *Critical studies on the antiquity of Man in Australia; in addition, some facts relating to the possible origin, migration and affinities of Australians and Tasmanians.*

Macintosh was Acting Professor from 1953 before becoming the Challis Professor in mid-1955. He reorganised anatomy teaching with the introduction of the ‘demonstrator system’, employing second-year resident medical officers as demonstrators in the dissecting rooms. This idea was not unlike the system used by Wilson, and earned Macintosh honorary fellowships of both the Royal Australasian College of Surgeons and the Royal Australian College of Dental Surgeons. By this stage student numbers were so large that without these demonstrators the department could not have survived.

Macintosh modernised the facilities of the Anatomy Department, remodelling the cadaver and mortuary storage facilities and increasing teaching space. He also revised the curriculum, presenting neurology in second year alongside anatomy of the neck and head, followed by a term of dissection. He reduced lecture hours for the study of anatomy in favour of actual dissection sessions. ‘Black Mac’ was a dynamic teacher who loved his subject and was illuminating in both dissecting room and lecture theatre.

Macintosh essentially contributed to the knowledge of three features of Aboriginal history – its antiquity, rich variation, and origins in migratory arrivals. He studied every significant ancient bone and artefact available and discovered or documented several of major importance.

In the 1960s, Macintosh established the geological context of the fossilised Talgaiskull (found 1886) and, using modern techniques, estimated its age at approximately 14,000 years.

Macintosh’s seminal work on the Australian dingo demonstrated the morphology of a 3000-year-old dingo skeleton to be indistinguishable from a modern skeleton. Having established a breeding colony of dingos in the faculty, Macintosh also confirmed their resistance to domestication and training, characterising their place in Aboriginal culture.

Macintosh retired from the Challis Chair in 1973.
Michael John Blunt began his career in medicine at the University of London in 1939, studying throughout the war years and graduating in 1945. After completing his ‘house job’ (the English equivalent of an internship) he commenced work in the Anatomy Department at the Royal Free Hospital School of Medicine in London, becoming lecturer in 1952. During this time he commenced neurological anatomy research towards his PhD (1956), titled *Studies on the Blood Supply of Nerve*. He maintained this research interest throughout his career. From 1955 to 1960 he was appointed as a senior lecturer, then Reader in Anatomy at St Bartholomew’s Hospital Medical College in London.

Blunt came to Australia in 1960 to take up the chair of Foundation Professor of Anatomy at the University of New South Wales. He quickly established himself as a fine teacher and researcher, gaining acclaim for his specialised knowledge in the area of neurobiology. He was particularly influenced by mentor Michael Abercrombie’s book *The Anatomy of Judgement*, with its focus on active learning and group discussion. Blunt’s own teaching methodology followed the same concept of small-group interactive, supportive learning environments.

In 1973, Blunt came to the University of Sydney as the Challis Chair of Anatomy. His preference for small-group teaching over large lecture presentations was embraced by the department. Prior to his arrival, the dissection course extended over three years and involved over 400 hours of dissection. Blunt effectively eliminated compulsory dissection but retained it as an option for students who were interested. This reduced the entire anatomy course to 270 hours. He replaced dissection with interactive discussions in tutorial groups.

His course offered a series of integrated modules of study, each with specific learning objectives. The lectures, films and readings were closely linked with opportunities for students to correlate the theoretical information with the investigation of three-dimensional material: prosected specimens, skeletal parts, models and the living body.

His method dictated that the initial learning group numbers were no greater than five, but that three or four groups then came together to discuss and clarify their findings under leadership of their tutor. At intervals, the student was able to evaluate their own progress with self-marked multiple choice questions. Blunt encouraged discussion between students and teachers, based on evidence that it was fruitful for students to build up an intellectual relationship with their teachers over long periods of time. When interviewed, his students gave high praise to Blunt and his teaching methods.

Blunt also took a keen interest in developing the teaching of neuroscience, consistent with his research interests. He strongly supported an incorporated approach, linking structure with function. An entirely new program in integrated neuroscience was developed, replacing separate courses (neuropsychology and neuroanatomy) that had been neither linked nor related. The result was a strong course shared between Anatomy, Histology, Physiology and Neurology.

His publications as Challis Professor reflected his interest in medical education. In *A New Approach to Teaching and Learning Anatomy* (1976) Blunt drew upon his years of experience to represent what he perceived to be the best practice for teaching anatomy. In his introduction he declared that the “core of knowledge” in the text was “arrived at by consensus of the anatomy staff and students within the medical schools of University of Sydney and University of New South Wales”. This innovative text detailed learning activities involving discussion, problem solving and self-evaluation designed to make the study of anatomy “a more intelligent and rewarding activity”.

Aside from his interest in medical education, Blunt published widely in medical and anatomical journals. His later work included research into areas of neurological anatomy, particularly intraneural branches of the retinal artery, and the role of glia in myelination. He also had a keen interest in the history of anatomy and the legacy of the Sydney Medical School. He published two biographical works: *Australian anatomy in the 1920s* (1983) and *John Irvine Hunter of the Sydney Medical School, 1898–1924* (1985).

Blunt retired from the Challis Chair of Anatomy in 1984.
Jonathan Stone commenced the study of medicine in 1959 but after his third year transferred to a Bachelor of Medical Science, studying under Professor Peter Bishop in the Department of Physiology. Bishop’s interest in exploring the visual system stimulated his interest in the structure and function of the retina and how it divides its projection into the two halves of the brain. Graduating with a BSc (Med) in 1962, Stone began further studies of the retina towards his doctorate (awarded 1966) under Bishop’s supervision. This time in Bishop’s laboratory influenced Stone’s life-long investigations into the cell biological basis of degenerative diseases of the retina and central nervous system.

After a postdoctoral year teaching at the Hebrew University of Jerusalem, Stone travelled to Chicago to work in JC Eccles’ laboratory, spending two years investigating the neurobiology of the cerebellum. He spent two further postdoctoral years at the Max Planck Institute for Psychiatry in Munich, in OD Creutzfeldt’s group.

Returning to Australia in 1970, Stone worked for five years as a research fellow at the John Curtin School of Medical Research, and then for 11 years at UNSW, becoming a professor in the School of Anatomy in 1985. He was appointed Challis Professor of Anatomy at the University of Sydney in 1987.

Stone believed the Department of Anatomy required greater attention in the areas of both research and anthropology. He continued his predecessor’s emphasis on small group teaching, but reintroduced the teaching of topographical anatomy by dissection and, with the aid of generous benefactions, instituted a major refurbishment of the department’s Shellshear Museum of Comparative Anatomy and Physical Anthropology. Stone also reestablished appointments to continue anthropological work which had been carried out by Professor Macintosh decades earlier, and began the refurbishment of the department’s century-old dissection facilities.

Stone’s philosophy of teaching anatomy went beyond the usual methods whereby students are taught by clinical problems only. He believed it was also important for students to understand that the structure of the body has histories: a developmental history in its embryology, and an evolutionary history in physical anthropology. Stone’s teaching emphasised the contribution of anatomy to the wider understanding of the human species.

This kind of teaching raised issues related to Aboriginal claims on ownership of Aboriginal remains. Stone took a sympathetic and analytical approach to the issue, noting how Aboriginal culture had been enriched by research work – much of it done in the Shellshear Museum – which established the antiquity of human settlement on the continent.

In 2003, after 16 years in the Challis Chair, Stone took up an appointment at the Australian National University. He returned to the University of Sydney as Professor of Retinal and Cerebral Neurobiology in 2007, continuing his work on degenerative diseases of the retina, and extending the analysis to cerebral degenerations and dementia.

Stone’s contributions to vision research have been globally recognised: in 1977 by the award of a Doctorate of Science from the University of Sydney; in 1984 by his election as a Fellow of the Australian Academy of Science; in 2001 by the award of the Centenary Medal; and in 2004 by the award of the Ludwig von Sallman Prize from the International Society for Eye Research.

Stone has played a major role in initiating and guiding the refurbishment of the Anderson Stuart Building, beginning with an appeal to Medical School graduates in 1990. This raised over a million dollars for heritage restoration, and inspired a program for the public spaces of this iconic building to be restored. Stone continues to guide this work, convening a Heritage Committee which develops recommendations for ongoing restoration work.

On the retirement of Jonathan Stone, the Department of Anatomy amalgamated with the Department of Histology and Embryology to form a large unit devoted to the study of human structure and development. This amalgamation has made way for a more diverse governance to develop. Currently there are eight professors within the Discipline of Anatomy and Histology, with Professor Bill Webster as Head of Discipline.
The early Prosectors
1903-1968
Prosectors 1903. From left to right: Arthur H Moseley, Thomas C Parkinson, George Bell, John GW Hill, John S Harris.

Prosectors 1903–1904. From left to right: Joseph L Shellshear, Hugh RG Poate, Francis B Craig, John EF Deakin.

Prosectors 1905. From left to right: Frederick WD Collier, George A Brookes, Edwin A Brearley, Mervyn A.

Prosectors 1905–1906. From left to right: C W Ferguson, Keneth Smith, Howard Bullock, Hugh G Allen.

Prosectors 1906–1907. From left to right: Mary BB Williams, Lindsay A Day, Allan M Purves, Elizabeth I Hamilton–Brown.


Prosectors 1912–1913. From left to right: Hector L Beale, Eric W Frecker, Paul E Voss, Fritz PM Solling.


Prosectors 1915–1916. From left to right: Leslie J Shortland, John W Ford, Oswald EJ Murphy, Michael R Flynn, Hugh C Barry.


Prosectors 1918–1919. From left to right: Charles F Anthony de Monchaux, George S Thompson, John PC Madden, unknown, Norman E Fenner, Douglas G Radcliffe.


Prosectors 1921–1922. From left to right:
H C Purst, Kerrod B Voss, Herbert S Roberts,
Herbert J Wilkinson, William C Smith,
Gordon J Cousins, Leslie Abramovich.

Prosectors 1922–1923. From left to right:
John S McMahon, John A Manion,
Kenneth CT Rawle, Louis S Loewenthal,
Alan J Canny, Alistair EM Moir.

Prosectors 1923–1924. Top row left to right:
Gladys DC Benz, Peter R Delamothe, William H Magill.
Bottom row left to right: Arthur W Morrow,
Harry M Rennie, Joan T Taylor.

Prosectors 1925. Back row left to right:
Charles A McDermott, Rawdon H Kenny,
Roland J Waddington, Gilbert E Phillips.
Front row left to right: David Cornwall,
Frederick W Clements.

Prosectors 1926. Back row left to right:
Stanley H Lovell, Andrew A Abbie,
Henry WH McClelland, Alan MB Grant.
Front row left to right: Claude J Constable,
William S Grey.

Prosectors 1927. Back row left to right:
Selwyn G Nelson, Ronald M Rawle,
Ralph C Huntley, Kenneth W Starr.
Front row left to right: Stanley L Spencer,
Alan A Shorter, Thomas M Clouston.


Prosectors 1931. Left to right: Mervyn M White, Bristow Johnson, Philip L Jobson, James M Yeates, GJ Lyons, Ray Clifton Apps.


Prosectors 1936. Back row left to right: Patrick M de Burgh, Wallace J Pullen, James S Robertson, John W Best. Front row left to right: Robert H Black, Walter RF Fox (BSc), WH Downs, Dudley C Williams.


Prosectors 1940–1941. Back row left to right: John Field Laycock, Philip W Van Gelderen, Zeman S Freeman, Theodore Kenneth Potts. Front row left to right: Iris Philpot, Gordon M Colditz, Joan Redshaw.


**Prosectors 1948.** Back row left to right: Norman R Clarke, Leslie Lazarus, Brian P Morgan, Robert N Tinning, Kenneth DG Edwards, Grahame M Budd, Gerry R Wagner, NDJ Smith. Front row left to right: John B Carpenter, Con SH Reed, Warwick J Cook, Lizette G Potts, Elizabeth R Jane, June R Clarke, Kenneth F Hume, James McRae.

**Prosectors 1949.** We apologise that no caption information was retained for this image. If you can name any of these students please contact Dr Lise Mellor on 9036 3366.

**Prosectors 1953.** Back row left to right: David S Nelson, (George) Seow Choon Wong, James R Smith, Graeme M Clark. Front row left to right: Geoffrey V Shead, Jean Woolridge, Kenneth G Harris, Yvonne Edna Cossart, Bruce A Warren.

**Prosectors 1954.** Back row left to right: John Hunt, Clarence Gluskie, Stuart Renwick, James McGraths, Trevor Morgan. Front row left to right: Bruce Connolly, Patricia Coyle, John Yu, Frederick Rost.
Prosectors 1955. Back row left to right:
Philip Thompson, George Vakkur,
J Kendall, Warren Arter, J Norman.
Front row left to right: Ronald Penny, J Caleo,
Doris Barnes, Donald Sheldon, Suraj Kashyap.

Prosectors 1956. Back row left to right:
Robert T McGuinness, Peter M Ronai,
Robert C Claxton. Middle row left to right:
David R Collison, Gytis Danta, Wim Zylstra,
John RR McEvilly, Donald R Wilson. Front row left to right:
Edmond Tai, Akos Z Gyory, "Harry",
Enid R Kaffer, Mark CJ Craddock.

Prosectors 1958. Back row left to right:
Malcolm R Robertson, Garry W Le Quesne,
Francis Hulme–Moir, Neil H Maclean, Robert P Child,
Charles AB Sharpe. Front row left to right:
Kowit Bhanthumnavin, Andrew WT Chan, Burton Bailey,
Neal L Thomson, John AAH Saafield, Victor P Chang.

Prosectors 1961. Back row left to right:
Cholm W Williams, Martin Silink, William J Davey,
Douglas K Baird. Front row left to right:
Paul R Stone, Katherine P Stanley,
Annette W Bailey, Jonathan Stone.

Prosectors 1962. Back row left to right:
unknown, Michael Moont, unknown, unknown,
Andrew G Child. Front row left to right:
Peter J Duval, unknown, Genevieve E Cummins,
David W Bliss, unknown.

Prosectors 1963. Back row left to right:
John M Hollingsworth, Peter D Wagner, Paul Crea,
John Lander. Middle row left to right:
James Leigh, Anthony J Bookallil,
Leon A Simons, Michael AR Baldwin.
Front row: Michael A McGrath, Robert Zimin.


In 1990–1991, the Prosector’s Competition was held after a break of over 15 years. Prosectorships had been awarded during this period, to occasional dissectors, but until a component of dissection was reintroduced to the medical course in 1989–90, the undergraduate competition was not held.

This photo gallery has relied on faculty records that are incomplete and sometimes inaccurate. We apologise for any errors. If you have any captioned photographs of prosectors before 1975 which are not shown here or can assist us in correcting any errors, please contact Dr Lise Mellor on 9036 3366.