

## CENTENARY CELEBRATIONS

This year marks the centenary of the departments of Pathology and Anatomy (Anatomy and Cell Biology) as independent departments. Formed in 1882, as the Department of Anatomy and Pathology, the two departments formally separated in 1906, with Sir Harry Brookes Allen the inaugural chair in pathology and Richard (Dicky) Berry inaugural chair of anatomy.

## Pathology

FROM ITS VERY beginning, the Department of Pathology had an emphasis on teaching clinical pathology and all through its hundred years many great teachers in pathology have contributed to the quality of Melbourne medical school graduates. Sir Harry Brookes Allen oversaw the development of the first pathology museum, which subsequently bore his name, and is said to have so enthusiastically collected specimens for display that the building was too small by the time it was completed.

Good teachers need good teaching material and, through the years, dedicated pathologists such as Edgar King, George Christie, John Hurley, Ross Anderson, Harold Attwood and Prithi Bhathal, amongst others, have continued Sir Harry's tradition and developed significant teaching collections, including macroscopic organs (pots), microscopic slides and 35mm slide photographs. These activities have been supported by dedicated staff within the department, such as Denis Cahill, who carefully maintained these precious teaching resources.

The new medical curriculum has presented many challenges, not least of which has been the delivery of uniformly high quality pathology teaching to students at multiple sites, including our metropolitan clinical schools and our rural campuses. One challenge is how best to utilise the unparalleled teaching material available in the department.

- The 'King' collection of some 5000 colour 35mm slides has been dormant in the basement for many years. This collection of meticulously catalogued photographs includes clinical photographs as well as macroscopic and microscopic pathological pictures, across almost the full range of systems pathology.



Edgar SJ King (1900-1966), MB BS 1923, first joined the Department of Pathology in 1928. He was made acting professor of pathology in 1934 and was professor of pathology 1951-66 (succeeding Peter MacCallum). He is pictured here (left) with Peter MacCallum (centre) and Roy D (Pansy) Wright (right) on the university grounds, in a photograph dating from the 1950s. Photo courtesy Medical History Museum

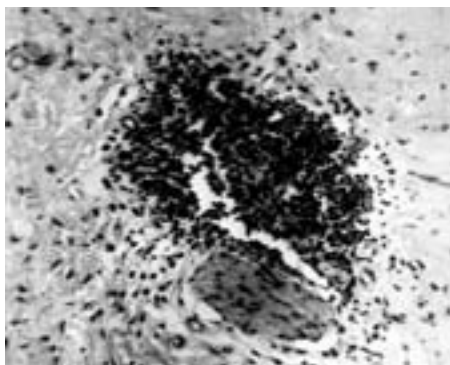
- The 'Anderson' collection of photographs and microscope slides represents a unique insight into neurological pathology that would be most difficult to emulate.
- In addition, the department has over 12,000 macroscopic pots demonstrating all manner of pathology. These pots are now housed in the joint anatomy and pathology museum, with only a fraction on display at any given time.
- Teaching collections of microscope slides, ranging from general pathology to specific collections such as the dental collection, are currently under-utilised due to the reduced emphasis on microscope skills for medical and other health science graduates.

The museum is an outstanding teaching resource for students on campus, but offers little to students away from the Parkville precinct.

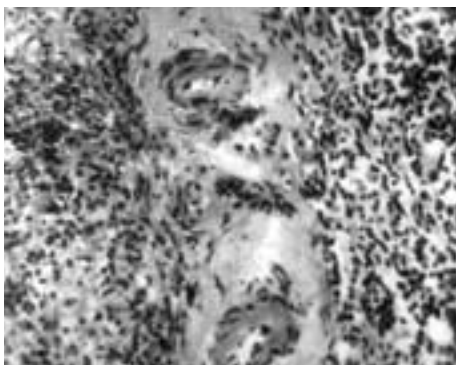
While the department has led the way in e-learning with the acclaimed skin atlas and 'patient under the microscope' programs, thanks to the efforts of Howard

and Virginia Grossman (Departments of Anatomy and Cell Biology and Pathology), the dilemma of how to make the best of the additional resources available now needs to be addressed.

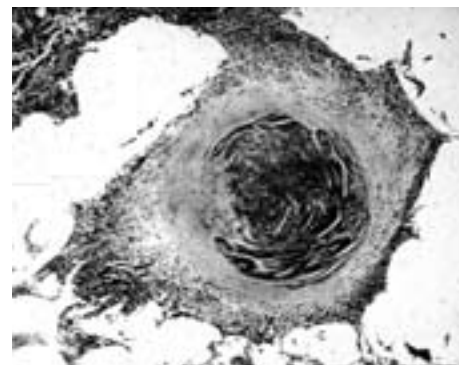
It is fitting then, that in our centenary year, we have commenced a sustained effort to bring these unique teaching resources into the modern medical curriculum. The Department of Pathology has employed clinical photographer, Dylan Kelly, to create a digital library of pathology images that can be used by everyone within the faculty for teaching. Already, the entire King collection of 35mm slides has been scanned by summer students into digital format and catalogued into an electronic database. A number of images will need some colour restoration, however, it is hoped that by mid-year the first module of images will be circulated through the clinical schools. The Anderson slide



From the Edgar King collection. 'Pericardium in Lupus Erythematosus Disseminatus. Micro. Shows cellular infiltration with disintegration of a small vessel.'



From the Edgar King collection. 'Spleen in Lupus Erythematosus Disseminatus. Micro. Shows the development of fibrous tissue layers around the small arterioles in the spleen.'

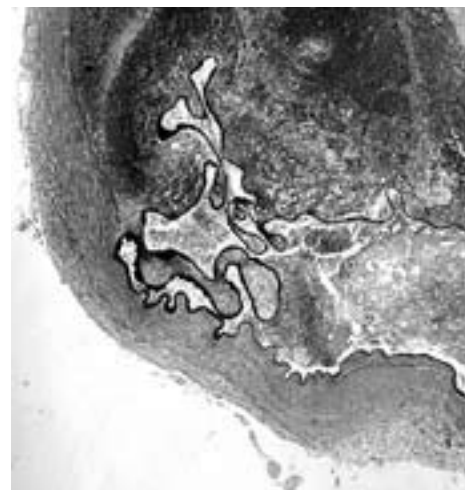


From the Edgar King collection. 'Silicosis of lung. Micro. From Dr A Ferris. Shows area of lung from a 'wet grinder' (edged tools on wet sandstone).'



Ross McDonald Anderson AM (1923-1998), MB BS 1950, spent more than thirty years with the Department of Pathology. He was first appointed lecturer in neuropathology in 1955 then, after some time overseas, returned to the department in positions of senior lecturer, reader and chairman until his retirement in 1988.

Photo courtesy Department of Pathology



From the Ross Anderson collection. Dissecting aneurysm with thrombus.

collection is currently being scanned and catalogued. Already, 2000 macroscopic pots have been photographed, producing pictures of outstanding quality. These will be used to support clinical pathologic cases (CPCs) and teaching modules on CD Rom. Plans are well advanced to create a virtual microscopy library of microscope slides that will be available on a central server for widespread access. Virtual microscopy allows the viewer to look at a microscope slide in different powers of magnification and to scan a whole microscope slide just as a diagnostic pathologist would do. This greatly enhances the teaching experience compared to a still photograph. The progress of these invaluable collections into the digital age, such that they can be used in a broad range of teaching media, is a most exciting venture.

Finally, the department has specifically employed David Kaufman, a diagnostic pathologist with a long background of clinical teaching experience, to develop the associated CPCs and visual modules that will make the most of these images.

## Anatomy

THE DEPARTMENT OF Anatomy and Cell Biology is celebrating its centenary anniversary with the writing of a history of the department by Ross L Jones, honorary fellow at the university Department of History and Philosophy of Science, titled *Humanity's Mirror: 150 Years of Anatomy in Melbourne*.

Anticipating the publication of this history, we publish the following selected excerpts:

### Melbourne's medical marketplace

The medical profession in Melbourne in the mid nineteenth-century was truly a 'medical marketplace'. As the leading article of the *Leader* newspaper claimed on 28 August 1869, the medical board was compelled to admit 'anyone who, by examination or purchase, has obtained some sort of professional degree from any "body duly recognised in the country to which such body may belong"'. This meant that the medical profession in Melbourne had no unifying qualification. Apothecaries, surgeons and physicians (all with a bewildering variety of qualifications) vied for the patients and their money. For example, in 1881 those who were allowed under the *Medical Practitioner's Act* of 1862 to treat the sick for a fee included not only 454 registered medical practitioners, but also almost 1000 assorted apothecaries, midwives, dentists, Chinese doctors, homeopaths, galvanists, mesmerists and hydropathists, amongst others. All this explains the regular fracas in Melbourne over the propriety of various schemes to attract patients. Rumour concerning the legality and

This year is a good time for the department to reaffirm its commitment to teaching, and to reaffirm the critical need for pathology, as a science and as the clinical basis of diagnostic and therapeutic decisions, to be at the core of any medical curriculum. We hope that the digital resources being generated will be useful throughout our next century of teaching pathology; teaching that will meet the standards one would expect in the University of Melbourne School of Medicine; teaching that would have made Sir Harry Brookes Allen proud.

Paul Monagle

Professor and Head, Department of Pathology

**Thank You...**to medical alumni whose donations are helping fund the development of these valuable teaching resources. If you would like information about donating to the School of Medicine please contact the Communications and Alumni Office on (+61 3) 8344 5888.

even veracity of many of the qualifications claimed by medical practitioners were the bread and butter of medical Melbourne at this time.

The leader of the raffish clique of Melbourne surgeons, the irrepressible James George Beaney, is an example of such gossip. Beaney, or 'jelly-belly' as he was called in the *Melbourne Medical Record*, was one of Melbourne's most successful surgeons and, according to his enemies, a plagiarist, fraudster, consummate self-advertiser, as well as an undeniably ostentatious high liver. Starting his career as an apothecary's assistant in a Collins Street chemist's shop, he took himself to Edinburgh and obtained a diploma at the Royal College of Surgeons in 1855 during the Crimean War at a time, according to his critics, when the acute shortage of surgeons resulted in a significant dropping of the standard needed to pass. His public extravagance, funded by his tremendous success, antagonised those who despised his methods, or were jealous of his achievements.

Dr GT Howard, one of Beaney's residents at the Melbourne Hospital, reported Beaney expressed much surprise:

when a patient rejected his offer of a glass of champagne in favour of a cup of tea, 'Augh, tea', he snorted—and then jauntily to us, 'I am becoming quite continental in my habits. I take a bottle of claret for breakfast, a small bottle of fizz for lunch and a big bottle for dinner', and he gently stroked a very obvious protuberance.

Beaney, although occasionally successful in the elections at the Melbourne Hospital (notably in 1875 and as a result of bribery, so claimed his opponents) never had the same



This plaster model of the irrepressible James G. Beaney is on permanent display in the Medical History Museum. Note the champagne bottle and cork lying at his feet.

success in gaining a position at the university. Halford was one of those who had little time for Beaney. Indeed, Halford was among a group of medical men who acted as expert witnesses in malpractice cases against Beaney. Perhaps the most famous case that involved Halford giving evidence against Beaney was the death of Mary Lewis in 1866 after a botched abortion. The others in the Halford camp were: William Pugh, who was the first surgeon to administer an anaesthetic in Australia; James Thomas Rudall, honorary surgeon at the Melbourne and Alfred hospitals, ophthalmologist, examiner in pathology and physiology at the university, and the first examiner of anatomy, along with David Thomas in 1862; James Edward Neild, lecturer in forensic medicine at the

university, later forensic pathologist for the state, editor of the *Australian Medical Journal* between 1862-79 and better known as one of Melbourne's leading literary critics; and Richard Thomas Tracy, lecturer in obstetrics, regarded as Melbourne's most distinguished obstetrician. All of them had violent disputes with Beaney at some time or other, and these men were to be important supporters of Halford and the medical school. It is possible to see in these events the beginnings of the unification of the profession under the umbrella of the nascent medical school, even though Halford's team was unsuccessful and Beaney won his cases, using the notoriety so gained for the purposes of self-advertisement.

Inclusion in the inner sanctum of the medical school precinct was not just refused to the under-qualified entrepreneur. Intellectual non-conformity could also tarnish a reputation. The most active proponent of contagion and germ theory and Darwinism in Melbourne, William Thomson, was denied appointment even when he was the only candidate for a position.

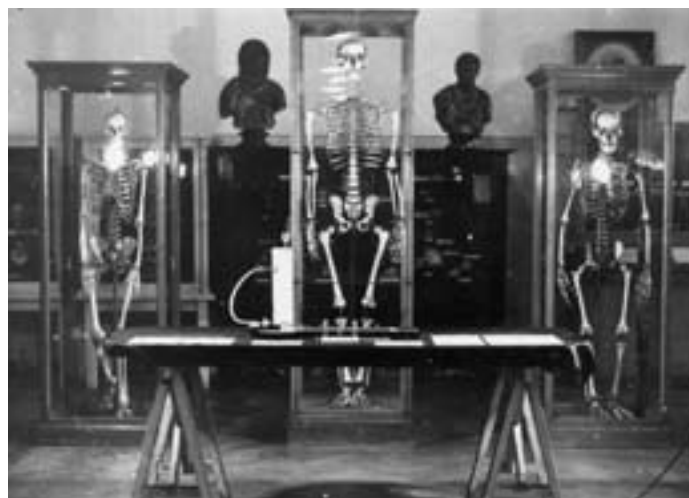
### Halford, McCoy, Allen and Darwinism

...on the evening of Wednesday April 29, 1914, the medical school celebrated its coming of age at the celebrations for its fiftieth anniversary. This took the form of a sumptuous dinner at the Grand Hotel, now known as the Windsor, for one hundred and eighty female and male medical graduates of the University of Melbourne...A bevy of political and university dignitaries also attended the celebration. In recognition of the status of the faculty in Melbourne, the chairman of the proceedings was Sir Arthur Lyulph Stanley, the Governor of Victoria. [In reply to a toast of the medical school, George Halford's student and successor, Sir Harry Brookes Allen, Professor of Pathology and Dean of the Medical Faculty, spoke of the tremendous achievement of the fifty years of medical education in Melbourne]. He soon assumed a more sombre tone, however, and conceded that the pace of revolution in science and medicine had thrown up serious challenges for staff and students. He spoke of the great difficulties of the early years of the school and the labours that allowed it to survive and then flourish. What had made establishing medical education in Melbourne even more difficult were, he explained, 'the tremendous changes which have taken place in scientific methods in the first fifty years of the Medical



Halford and students dissecting c1864. Photo courtesy Medical History Museum

School'—changes which the medical school did not always accommodate easily. Allen listed those changes for his audience. First there was the discovery of the periodic law in chemistry, described as the 'Alphabet of Creation'; and the 'coming of the doctrine of Evolution, which has transformed our whole outlook on the world around us, and on ourselves even in our highest relation'. Also, in this period appeared 'antiseptic surgery which ...revolutionised all surgery' along with the beginning of the new science of bacteriology. In professorial fashion Allen instructed his audience to 'think of the great men who have been responsible for these new developments—Mendeleef, Darwin, Lister, Pasteur, and their successors—and you will see how all opinion has been in a state of flux, and the task of teachers and taught has been correspondingly difficult'. The medical school had indeed initially struggled to keep up with the pace of the discovery of new ideas. Throughout the first fifty years of the Melbourne medical school, however, the study of anatomy had been one constant in that sea of change. The assimilation of Charles Darwin's theory of evolution as found in the *Origin of the Species*, published in 1859, is one telling example of the sometimes reluctant acceptance of new ideas in the early decades of the medical school. In this case, the study of anatomy at the university was directly implicated in the tale.



Skeletons on display in the second anatomy building (Berry building). These skeletons have been a feature of the museums since the late 1800s. Photo courtesy Department of Anatomy and Cell Biology

Enquiries about *Humanity's Mirror: 150 Years of Anatomy in Melbourne* can be made to Tricia Hartshorn, Department of Anatomy and Cell Biology, on (+61 3) 8344 5804.