Celebrating 100 years of pharmacy in the historic Hawthorn Building

Larry Goodyer and Geoff Hall from Leicester School of Pharmacy, De Montfort University, describe the history of the teaching of pharmacy at the university’s Hawthorn Building and the university’s plans to mark the occasion with a reunion for past staff and students.

The year 2009 marks a century of pharmacy teaching and research at De Montfort University’s Hawthorn Building. The university plans to mark the occasion by providing the opportunity for past staff and students to revisit the Hawthorn Building, rekindle friendships and to celebrate the illustrious history of the School of Pharmacy in Leicester.

History of the Hawthorn Building

In 1897, the Leicester College of Technology built, at the cost of £25,000, the first phase of what is now the Hawthorn Building. Subsequent phases were added in 1909, 1928 and 1939. The building occupies the site of the Church of the Annunciation of our Lady founded in 1354 by Henry Plantagenet, first Duke of Lancaster, Earl of Derby and Leicester. It was to this church that the body of Richard III was reputedly brought after his death at the Battle of Bosworth Field in 1485. Also on this site was the 13th century Augustinian (White Friars) monastic hospital of the Priory of St Katherine linked to the Collegiate Church of St Mary in the Newarke. Its herb garden is still nearby, giving a pharmacy link with the site going back 800 years. Up until 1952, the Hawthorn Building (named after the second headmaster of the college) comprised the entire college.

Pharmacy teaching

The early courses were taken part time. Full-time programmes began in 1919, with the first classes being for ex-servicemen. There was a steady increase in the number of students from this time onwards and, by 1931, there were 55 full time and 50 part-time pharmacy students. It was considered to be one of the foremost training centres nationally and it attracted students from all over the country. In 1930, it was recognised for the London University external pharmacy degree (BPharm) and the Pharmaceutical Society pharmaceutical chemist diploma course. In 1966, these courses were superseded by the BSc pharmacy (honours) degree, awarded under the aegis of the Council for National Academic Awards. Soon afterwards, the Leicester Regional College of Art and Technology became Leicester Polytechnic. The institution, as Leicester Polytechnic, gained university status in June 1992 and the first De M onfort University graduates were produced in the following year.

During the 100-year celebration event, students will be able to view a great deal of past memorabilia, including pictures of staff and students. For instance, there may be some students who remember A. R. G. Chammings...
who was head of school in the 1930s but, certainly, there are many who would have been at Leicester from the early 1950s when Colin Gunn was head of school. Among the most fondly remembered members of staff was Sidney Carter who joined the school in 1946 following wartime service in the navy. One of the first PhD students in the school was John Richards who later became head of school between 1991 and 1996.

In addition to the pharmacy undergraduate degrees, the school developed a diploma in formulation at the behest of the pharmaceutical industry. This successful course was initially developed and led by Stuart Proudfoot. It evolved into the higher national diploma in science of medicinal and cosmetic products and led to the establishment of the BSc pharmaceutical and cosmetic science degree in 1991. Also developed during the 1970s was the block-release HND in medical laboratory science course. This was the forerunner to the BSc biomedical science course, which is now part of the school of allied health sciences. In addition to undergraduate education and postgraduate research degrees, the school has offered postgraduate courses for pharmacists for a number of years. These courses have included the MSc in Pharmacotherapeutics and distance-learning courses in areas of practice and clinical pharmacy.

Current activities

In more recent years, the school of pharmacy has become established within the faculty of health and life sciences, which also includes the schools of nursing and midwifery, allied health sciences and applied social sciences. This provides an ideal resource for innovative interprofessional education programmes.

Apart from the MPharm, the school of pharmacy now runs two other undergraduate programmes the afore-mentioned and increasingly popular BSc in pharmaceutical and cosmetic science and, more recently, a forensic science programme. The M Pharm degree was most recently reaccredited in 2006 with the new course receiving a particular commendation from the Royal Pharmaceutical Society for its student-focused approach and, indeed, the 2008 national student survey put us among the top institutions for pharmacy. The reaccreditation gave us the opportunity to develop a particularly patient-centred approach in the programme, both in terms of science and practice.

Postgraduate education work focuses on the distance-learning format and the diploma in clinical pharmacy remains popular among pharmacists who wish to gain this postgraduate qualification. This can now be taken in a more flexible modular form that also includes supplementary and independent prescribing as an option. Medicines use review training and assessment has been provided to Boots pharmacists for the past two years. A new MSc in pharmaceutical biotechnology, which should attract those working in the biotechnology industry, will begin in September 2009.

Research

Research has been consistently strong at Leicester and, in the 2008 research assessment exercise review, most of those entered were assessed to be of internationally competitive quality. Present principal areas of research include pharmacology and related cancer studies, pharmaceutical technologies and micro-analytical techniques, which span the full range from characterisation of intricate molecular pathways to direct involvement in patient care. Currently, one of our most exciting projects is the development of a regulated insulin release device for diabetic patients through the encapsulation of insulin within a glucose-sensitive gel. Other research within pharmaceutical technologies is increasingly focused on strategies for process development, including freeze-drying, particle engineering and characterisation and powder flow. At the centre of this is the use of a range of physical analytical techniques, including terahertz and dielectric spectroscopy, atomic force microscopy and laser diffraction, and the development of these techniques for online process control.

Cell-based studies have included work to produce implantable proliferating hepatocytes to treat those with liver failure. Initial studies investigating this problem using rat hepatocytes have now progressed to the exploration of human hepatocyte preparations. The accurate quantitation of drug concentrations in pin-prick blood samples from neonates is another challenging project that has attracted new and Emerging Applications of Technology funding, which offers significant promise in the development of pharmacokinetic profiles in such small infants and hence the ability to optimise paediatric patient care.

The Hawthorn Building, School of Pharmacy, De Montfort University

One of the most effective treatments for malaria is artemisinin, a natural product found in Artemisia annua. Semi-synthetic derivatives (eg, artemether and arteoate) are currently used to control the causative agent, Plasmodium falciparum. Artemisinin is too complicated a molecule to synthesise and a team within the school (in collaboration with several companies and the National Institute of Agricultural Botany) with the Department for Environment, Food and Rural Affairs funding is developing an elite high-yielding strain with a sustainable source of seed in order to produce a quality crop in England. The same team is developing a crop in England for the production of podophyllotoxin and its semi-synthetic derivative etoposide, the first-line treatment for small-cell lung cancer and testicular cancer.

The celebrations

To celebrate this centenary milestone, De Montfort University is pleased to be hosting a number of centenary events through 2009 and 2010. On 3 October 2009, we are inviting all graduates from the school to the university’s campus for an afternoon of guest lectures and campus tours, with plenty of time to see old friends and tutors. In the evening, vice-chancellor Philip Tasker will host a celebration dinner with special guests and live music at Leicester’s Ramada Jarvis Hotel, formerly the Grand Hotel, where the school of pharmacy used to hold its annual dinner.

Throughout the academic year of 2009–10, we plan to run bi-monthly lectures on current pharmaceutical issues. These lectures will feature eminent pharmacists and other scientists presenting diverse topics, such as the future of pharmacy, areas of current expertise within the school and new developments in pharmaceutical sciences.

Invitation to past graduates

Past graduates are welcome to join those who have already registered an interest in the events. They should telephone 0116 257 7027 and they will be added to an exclusive mailing list with updates about all facets of the centenary celebrations. There is a list of the graduates we have managed to trace and invite on our website.

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