The pre-clinical departments
I C Roddie

This is a short account of how the pre-clinical subjects have grown and developed since the foundation of the Belfast Medical School in 1835 and of some of the personalities who were involved (Fig 1).

PROFESSORS OF ANATOMY AND PHYSIOLOGY

In 1835 when the Foundation Chair in Anatomy and Physiology was established, the Foundation Professor, Dr J L Drummond, had the entire responsibility for all pre-clinical studies. For this task, we today employ seven professors, 25 readers, senior lecturers and lecturers, four research officers, two research assistants, 39 technicians, six clerical officers and one computer programmer, 84 people in all. I would like to think that the teaching today is 84 times better than in 1835 but I suspect that this may not be so.

James Lawson Drummond (Professor of Anatomy and Physiology 1835 – 49) will be remembered as much for his skill in setting up the Belfast Medical School in an inhospitable financial and difficult professional climate as for his contribution to anatomy and physiology, though he was author of a reasonable text.¹ He had been an attending physician at the Belfast Fever Hospital since 1814 when he was appointed to a newly established Chair of Anatomy and ‘Medical’ Physiology in the Faculty of Arts in the Belfast Academical Institution in 1819. In this role he taught natural philosophy and natural theology and performed some dissection studies for students preparing for the ministry. When the Medical School was established in 1835, largely through his personal efforts, he was appointed a Foundation Professor with the Chair of Anatomy and Physiology as well as the newly created Chair of Botany — which he had been teaching since 1822 — and he was the school’s first Dean. From time to time he had a part-time assistant and he shared a lecturing room with four other professors teaching different disciplines. During his years of office he was heavily involved with teaching, administration and clinical duties; he had little time for personal research. He carried on for 14 years (though he surrendered the Chair of Botany

Figure 1.
Family tree of heads of pre-clinical departments.

Professor Ian C Roddie, MD, DSc, FRCPI, MRIA, Dunville Professor of Physiology, The Queen’s University of Belfast, 97 Lisburn Road, Belfast BT9 7BL.

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to William Matier in 1836) until the school was transferred to Queen's College Belfast. Drummond did not transfer with the school. In 1849 he broke his thigh in an accident and retired invalided on a pension of £150 per annum. He died in 1853.

Hugh Carlisle (Professor of Anatomy and Physiology 1849 – 60) was born in 1793 in Armagh. He was educated at Trinity College Dublin, taking his BA in 1817. In 1832 he became a demonstrator in anatomy at Trinity as an assistant to his uncle, the distinguished anatomist Professor James McCartney. In 1837 he graduated MB and in the same year became senior proprietor and Professor of Anatomy and Physiology in the Park Street School of Medicine, one of the most successful private schools, which closed on his appointment in 1849 to the foundation Chair of Anatomy and Physiology in Queen's College Belfast. Originally he had been appointed to Queen's College Cork but at the last minute exchanged with Alexandre Carte who had been appointed to Belfast (since QCB and QCC were constituent colleges of the Queen's University in Ireland, posts and incumbents were interchangeable). Thus he came to the new medical school at Queen's College Belfast at the age of 56 and as one of its most senior professors. He served on its first Library Committee and prepared its first calendar. He was the only Faculty of Medicine member not to have a private practice but his university stipend was still relatively high (university salary £200, student fees £307, total £507) compared with professors in other faculties. Eventually he became Dean and thus a member of the governing council. Academically, according to Moody and Beckett, he was of 'local distinction' only. He was renowned for his 'physical powers' and his knowledge of 'comparative anatomy'. He died in office aged 67 at his home in Holywood.

Peter Redfern (Professor of Anatomy and Physiology 1860 – 93) was born in Chesterfield, Derbyshire, in 1820. He studied medicine at Edinburgh and University College London, graduating MB in 1844, MD in 1847, and FRCS in 1851. From 1845 he was a lecturer in anatomy at King's College Aberdeen, during which time he was active in research, conducting experimental studies on the nutrition and repair of articular cartilage. In 1860 the lectureship was suppressed when King's and Marischal College were amalgamated, and he successfully applied for the Chair of Anatomy and Physiology at Belfast in 1860, a chair he was to occupy for the following 33 years. Working through the administrations of three presidents, Henry, Porter and Hamilton, he was an important element of continuity in rapidly changing times. He became the QCB representative on the Senate of the Queen's University in Ireland and, when the Royal University of Ireland was established in 1883, he was appointed an examiner and medical fellow to it. He is best remembered at Queen's for being a very effective teacher, enjoying continuous prestige, popularity and success, and for his sheer ability — 'the next to Dr Andrews in point of mental power and energy' as President Henry wrote in 1873. The Medical School flourished during his time and, with student fee income, his remuneration was the highest of all professors in Belfast. In 1874 he was President of the Biology Section of the British Association which visited Belfast that year.

He played a role in the moves to admit women to the university, not always on the side of progress! In 1870 there was a proposal that women be admitted to QCB on condition that (a) they paid an extra fee; (b) they signed a declaration that they
would not disrupt classes or undermine discipline; (c) they would not be eligible for scholarships, and (d) they would not enjoy all the privileges of male students. Redfern objected to these restrictions and, with Andrews, wanted full equality if the Charter permitted. He gave his view as follows: ‘The continued success of females in the intermediate and various university examinations for some years forbids further speculation as to their chances in intellectual competition with men. No one would dare at present to suggest that they will not be able to hold their own in intellectual struggles on any subject if they have equal advantages with men’. He did not pursue the matter and adopted a more reactionary stance over the question of women studying medicine and admitting women to the University when the matter came before Convocation in 1873, and again, at the University Senate, voted against Miss Edith Pechey when she applied for admission to QUL to sit for the MD examination in 1873.

There was a problem about his retirement. The government considered that, like civil servants, university professors should retire at 65. University staff did not accept this. However, Redfern agreed to go in 1893 when he was 73. He died 19 years later in retirement at Templepatrick.

PROFESSORS OF ANATOMY

A factor precipitating Redfern’s retirement was the proposal to set up a separate chair in physiology with money being offered by the Sorella Trust established by the Dunville family. The government did not wish this to be implemented until the matter of university retirement age was settled. When Redfern agreed to retire, Anatomy and Physiology were separated into two independent departments and there have been separate chairs from that time.

Johnson Symington (Professor of Anatomy 1893 – 1918), known affectionately as ‘Symie’, was born in 1851 in Buckinghamshire. He was educated at Edinburgh University, where he graduated MB in 1877 and MD in 1885. He was appointed at the age of 42 to the Foundation Chair in Anatomy which he held for the next 25 years.

Symington was interested in research and built up a national, if not international, reputation for his work on topographical anatomy. Perhaps he is best known for his pictures of transverse sections of the body which he developed from serial cross-cuts through the frozen body of a young woman. These pictures are remarkably similar to the beautiful pictures made by computer-assisted tomography today. He became an editor of the standard anatomical text of his day, Quain's Anatomy. He was elected a Fellow of the Royal Society in 1893, and also became a Fellow of the Royal Society of Edinburgh; he was President of the Anatomical Society of Great Britain and Ireland from 1904 to 1906, and a medical fellow of RUL from 1894 to 1909. He also played an important part in university administration and was one of the most influential personalities in the Medical School. He was appointed Registrar to QCB in 1901 and continued as Registrar to the new Queen's University of Belfast, admittedly a down-graded office, from 1908 to 1918. He helped initiate the Better Equipment Fund. He was one of the University Commissioners set up to establish the new universities in Ireland. The Commissioners wanted to make the Registrar post a full-time one, but Senate was concerned about the effect this might have on the teaching of anatomy, and Council about the dominance of the Senate and its officers. So the Commissioners agreed to the creation of the post of Secretary to the University

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with responsibility for the administrative work previously carried out by the Registrar. Since then the Registrar post has been an administrative (unpaid!) sinecure with ex-officio membership of Senate and Standing Committee and eligibility for appointment to Senate committees. It disappeared under the 1981 Statutes, some duties being assumed by the new Academic Assessor. Symington gave up the Registrar’s house at the south end of the Lanyon Building in 1909, and during the summer vacation it was converted to provide classrooms, ladies’ rooms and a staff common room (the Old Staff Common Room). When he retired in 1918, he returned to Edinburgh where he died in 1924 aged 73.

Thomas Walmsley (Professor of Anatomy 1918 – 51) was born in Bombay and educated at the High School in Greenock and the University of Glasgow where he graduated MB in 1912. He at once became a junior demonstrator in the Anatomy Department in Glasgow and later senior demonstrator and lecturer (1915), and was appointed to the Chair of Anatomy at Belfast in 1918 when just 30, taking up his duties in 1919. In 1918 – 19 P T Crymble and Margaret Purce ran the course. His relative youth and lack of war service resulted in some initial difficulties in his dealings with ex-service men returning to take up medical duties after the First World War, but these were short-lived and for most of his career he was a charismatic figure who made a deep impression on the students he taught. His quiet speaking voice, his scholarly appearance and demeanour, held students in rapt attention at his lectures. He had an unusual approach to anatomy and his descriptions of the human body drew heavily on comparative anatomy and embryology. He had a way of saying things which made them memorable: in a lecture he might introduce a concept with a phrase such as ‘you will remember from when you were dissecting the crocodile’. Henry Barcroft, when he was introducing himself as the new Professor of Physiology in 1934, was told ‘You know, Barcroft, anatomy and physiology were once taught here as one subject by the Professor of Anatomy. I dare say it will be that way again one day’. My father was very impressed when Walmsley asked him had he not a son reading medicine: Walmsley felt sure he recognised the head mould.

His research was of the armchair rather than the bench variety. When Professor Bridges and I were BSc students with him, he told us that he did not need to do experiments, nature had carried out all the experiments he required. His bench microscope rarely moved: the green baize beneath it was darker than elsewhere. He had an interesting and popular public lecture entitled ‘A basket of bones’ in which he built up a picture of a past society from the evidence of their bony remains. Being somewhat of a recluse by nature and perhaps a disappointed man in his profession, he did not play much part in university administration, but he inspired an unusual number of students to become professional anatomists, several attaining chairs and readerships and some gaining lasting reputations, such as William Hamilton and Dixon Boyd. Towards the end of his career, he developed cancer of the stomach and died in County Armagh in 1951 aged 62.

John Joseph (Jack) Pritchard (Professor of Anatomy 1952 – 79) was born in 1916 in Adelaide, South Australia. He was intellectually precocious and also extremely talented in mathematics and qualified BSc in Medical Science and in Mathematics with high honours at the University of Adelaide in 1934, when only 18. The following year he was awarded a Rhodes Scholarship to work at Oxford in the Department of Physiology with J C (later Sir John) Eccles, the Australian Nobel laureate. At Oxford he obtained a 1st class honours degree in physiology
and qualified MB, BCh, after clinical training at St Bartholomew’s Hospital in London. After graduation he trained in anatomy, first as a demonstrator at University College London and then as lecturer and later reader at St Mary’s Hospital Medical School. Here he got to know David Greenfield and, when the Chair of Anatomy at Queen’s fell vacant, Greenfield, who in 1948 had moved to the Chair of Physiology at Belfast, suggested that he should apply.

Jack Pritchard liked and enjoyed students and this warmth was fully reciprocated. No student forgot the hospitality at his house in Belfast or his retreat on the Glenarm estate. He taught topographical anatomy with great skill and even greater verve and the way he could build up chalk pictures of complex anatomical relationships was enjoyed and appreciated by generations of students. He also loved conversation, travel, and many of the good things of life, so his extrovert and warm-hearted personality and _bon vivant_ tastes soon became known and thoroughly welcomed world-wide. Scientifically he is known for his work on bone growth and repair. He was elected President of the Anatomical Society of Great Britain and Ireland from 1967 to 1969 and, as editor of the _Journal of Anatomy_ from 1973 to 1979, he gave generously of his time to help authors get their work into a form which was suitable for publication. In later years, his health — though not his energy, popularity or humour — deteriorated and he died suddenly at home in 1979 aged 63. He was succeeded by Tom Harrison, a Queen’s graduate who started work in the Anatomy Department with Professor Walmsley shortly after the end of the Second World War and continued until 1984 when he retired to live on the land of his forebears near Ballynahinch. A fine neuroanatomist, Harrison also worked on growth and was a lucid and meticulous lecturer.

PROFESSORS OF PHYSIOLOGY

In 1893 a separate Chair of Physiology was created through the generosity of the Dunville family. This was the first new chair to be created since the inception of the College (1849) and so marked an important milestone for Queen’s. The Dunville family business was distilling, and their product, Dunville’s Irish whiskey (Fig 2), was widely marketed and drunk all over the world in considerable quantity bringing pleasure to many and great wealth to the proprietors! In 1872 the family endowed a trust fund, the Sorella Trust, in memory of Sarah Dunville who had died while quite young. Income from this trust still provides funds for the much prized Dunville Studentships and, in 1893, the trust granted £240 per annum to endow the Dunville Chair of Physiology. The early professors were sometimes known as the ‘whiskey professors’.

_William Henry Thompson_ (Professor of Physiology 1893–1902) was the first ‘whiskey professor’. Born in County Longford in 1860, the year his predecessor Peter Redfern was appointed to his chair, he was educated at Dundalk Institution
and Queen's College Galway where he graduated in medicine. Postgraduate training followed in Hamburg, Heidelberg and in Leipzig where he worked with the famous physiologist Professor Carl Ludwig, and from 1887 to 1891 he was a demonstrator in anatomy at Trinity College Dublin, during which time he was admitted to FRCS. In 1892 he worked in the Department of Physiology at University College London with Professor E A Schäfer, researching into the degenerations within the central nervous system caused by lesions of the temporal lobe cortex. In 1893 he was appointed to the new Dunville Chair in Belfast and the following year married Redfern's eldest daughter, thus uniting anatomical and physiological interests domestically as they had once been united academically. From University College London he brought Harry Miller (aged 22) as his technical assistant. Harry became known to generations of staff and students in his 44 years at Queen's. In the early days he lived in the Hamilton Tower at the front of the University and when he became ‘head assistant’ in 1924 he was joined in the Tower by John (Shakespeare) Irvine as junior assistant. The splitting of the Department of Anatomy and Physiology also meant some splitting of the student fees, and so the incomes from Queen's of the new pre-clinical professors were about half that enjoyed by Redfern, but even so they equated well with those of their other professorial colleagues.

Thompson was perhaps the first pre-clinical teacher systematically to carry out experiments, no doubt influenced by his early experiences in Germany and London. In addition to his work on nerve-tract degeneration, he studied the effect of atropine on renal function since it was then considered that urine might be secreted by the kidney in a manner analogous to that in other glands, such as the pancreas, which were affected by atropine. He also studied the effect of various peptones on the circulation and urine secretion in dogs. He worked largely single-handed, helped only by his technical assistant, until the Better Equipment Fund in 1902 provided funds to employ a demonstrator. In 1900 he was elected President of the Ulster Medical Society and took as his presidential address topic the recent advances in the physiology of gastric digestion which were emerging from Pavlov’s laboratory at St Petersburg. In 1902, Thompson was appointed Professor of the Institutes of Medicine at Trinity College Dublin. Keenly influenced by Pavlov’s work, his research interests now moved towards human nutrition in which he built up a reputation which took him to be the scientific advisor to the Ministry of Food in the First World War, work for which he was knighted in 1918. He didn’t survive long to enjoy the honour; he went down in the Irish Sea with the torpedoed RMS Leinster in October the same year.

Thomas Hugh Milroy (Professor of Physiology 1902–35) was born in Wigtownshire in 1868. He was educated at Edinburgh where he graduated in medicine in 1891. After some years’ postgraduate study in Germany he returned to Edinburgh as a lecturer in Physiology to work with Professor Schäfer, who had moved there from London in 1899. Thus both Thompson and Milroy were influenced by this most eminent physiologist. (Because of attitudes in World War I, Professor Schäfer later changed his name to Sharpey-Schafer).

Milroy’s main interest was in the physiological chemistry of muscular contraction, an interest shared with his brother, John Alexander Milroy, who came to Belfast with him in 1902 as a demonstrator in physiology, later lecturer in biochemistry and finally first holder of the J C White Chair of Biochemistry (1925). Thomas was a scientist of exacting standards and high principles. He was a quiet, austere and reserved man who failed to communicate the excitement of the subject or...
the importance of the discoveries in this revival period of physiological research. Certainly, as can be seen from the presidential lecture he gave to the Ulster Medical Society in 1928 on ‘Physico-chemical adjustments in the blood’, he made few concessions to the scientific weaknesses of an unsophisticated audience. However, he was held in high and consistent esteem in scientific circles, as is illustrated by the fact that near the end of his career he was invited, in 1931, to write a review on ‘The present status of the chemistry of skeletal muscle contraction’ for the prestigious international journal *Physiological Reviews*, while as early as 1907 he was one of the few British delegates to give a paper to the Seventh International Physiological Congress at Heidelberg, a group which included Langley, Sherrington, Barcroft and Bayliss. David Smyth, FRS, Queen’s graduate and one-time Professor of Physiology at Sheffield University, attributed his own love for and rectitude in physiology and the scientific method to his early training, under Milroy, as a demonstrator in the Queen’s department in 1933.

On the administrative side, Milroy’s long tenure of office made him a force for stability within the Faculty and University. He worked on the new constitution for Queen’s University Belfast which came into existence in 1908, and later was Dean of the Faculty of Medicine. He was basically a shy man: unmarried, he lived with his sisters. In an appreciation of him on his retirement, it was said that he disliked controversy and was reluctant to engage in sweeping changes or take bold measures. He was always an influence for restraint, perhaps evidence of his good sense. As the years passed he withdrew increasingly from academic politics and, like his brother John, held himself aloof from the general business of the University. He retired in 1935 and returned to Scotland where he died 15 years later aged 80.

*Henry Barcroft* (Professor of Physiology 1935–48), though born in Cambridge in 1904, is descended from an old Irish Quaker family. His father, Joseph (later Sir Joseph), Professor of Physiology at Cambridge, was born in ‘The Glen’, a tall house which was attractively set to the west of the main Belfast–Dublin road south of Newry. Barcroft was educated at Marlborough College and King’s College Cambridge where he graduated BA with 1st class honours in physiology. He took his clinical training in St Mary’s Hospital and graduated MB, BS, from the University of London in 1930. From 1932 to 1935 he was a lecturer in physiology at University College London.

Like his predecessor Milroy, Henry Barcroft was an excellent, dedicated scientist and to him we owe most of our knowledge of the nervous control of human peripheral blood vessels. Like much work of genius, his had a deceptive simplicity, so that once it had been done it seemed obvious. He had the knack of being able to devise simple physiological questions which would give important and clear-cut answers. His experiments and writing had a straightforward, lucid elegance which made them easy to undervalue; those, however, who familiarised themselves with his work were impressed by the quality of his mind and his undeviating determination to get things done. With limited staff and funding he managed a programme of research whose results have stood the test of time and make standard reading today. His contribution to science was recognised by his election to Fellowship of the Royal Society and to Honorary Membership of the Physiological Society. Recently the latter Society had a special ceremony to mark his 80th birthday. Basically a man of science, Barcroft had little interest in University administration: in this as in his researches, it could be said that he had a proper sense of priorities.

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In 1948 he left Belfast to take the Chair of Physiology at St Thomas's Hospital Medical School in London. He and his wife Biddy look back with great nostalgia to their time at Queen's and their home in Malone Park.

David Archibald Mant Greenfield (Professor of Physiology 1948 – 64) was born in Poole in Dorset in 1917 and educated at Poole Grammar School, and at St Mary's Hospital Medical School where he graduated BSc in physiology with 1st class honours in 1937 and MB, BS, three years later. During his student days at St Mary's much of the teaching was didactic and called for little intellectual curiosity, but Greenfield's formidable and sensitive intelligence lent itself to enquiry and he was greatly influenced by the Professor of Physiology there, Arthur St G Huggett. Huggett encouraged his students to think about physiology in terms of scientific evidence, and Greenfield early became committed to the intellectual freedom and scientific honesty that physiology seemed to offer, commitments which never weakened with the years. This intellectual discipline was reinforced by working with Professor George Pickering, Professor of Medicine in St Mary's at the time, who argued and practised the belief that an open mind and an investigative approach were as relevant to clinical work as they were in the basic sciences. After his intern year, Greenfield returned to a lectureship in physiology at St Mary's, and at 31 was a very young appointment to the Chair of Physiology in Belfast in 1948.

I was in the middle of my pre-clinical studies when Greenfield came into post. He so impressed me that, when the opportunity to read for an intercalated BSc presented itself, I was anxious to read for it in physiology. It turned out to be one of the most formative years in my life and I was very fortunate to have had such a unique opportunity. Greenfield's time at Queen's was a time of great success not just for himself, for the medical school and the University, but on account of the great upsurge of interest in physiology which he generated in those fortunate enough to work with him. While personally modest, unselfish and self-deprecating, he was intensely loyal, supportive and encouraging to his juniors. He built up their self-confidence, stimulated them to think independently, and encouraged them to take responsibility and not shrink from its duties. It may be no coincidence that so many of those influenced by Greenfield subsequently became Deans and/or held other professional administrative offices: Greenfield himself became first Dean at Nottingham; J T Shepherd became Dean at the Mayo Clinic and is now effectively its Director; R F Whelan became Dean at the University of Adelaide and later Vice-Chancellor at Western Australia and Liverpool; R S Coles became Clinical Dean at Bristol; W E Glover became Dean at the University of New South Wales in Sydney, Australia, while I myself and A H G Love have been successive Deans of Medicine here at Queen's, and are to be followed by R G Shanks next session (Fig 3). I suspect that much of this was due to Greenfield's influence on our careers.

Scientifically, the Greenfield years were very productive. He continued and extended Barcroft's interests in the human peripheral circulation: indeed, he and his team laid much of the modern knowledge in this field of physiology and the department became one of the best known in the UK and beyond. The standard test for assessing the circulatory reflexes of astronauts is based on Greenfield's work on the effects of lower body suction on man. He will be remembered for his enthusiasm and his enormous capacity for hard work. He had excellent manual skills: in the workshop, his products were known for their ingenuity, simplicity and robustness; in the drawing office, his diagrams were known for their clarity.

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With Greenfield, everyone could do anything if they put sufficient thought and effort into it. In his later years at Queen's, he played the major role in arguing for and planning the Medical Biology Centre which now houses the facilities for the pre-clinical departments.

In 1964 he was invited to return to St Mary's as Professor of Physiology to succeed his old chief, Professor Huggett, an invitation he felt bound to accept. At that time, however, new medical schools were being considered for Nottingham, Southampton, and (later) Leicester, and Professor Pickering, who had been given responsibility for planning the new medical school at Nottingham, persuaded Greenfield to be the Foundation Dean, and he moved there in 1969. This proved to be a difficult and onerous task but Greenfield carried it out with great success. His experience, utter integrity, charm and style, made him a very valuable member of many national committees. He served on the UGC and was chairman of its Medical Sub-Committee. He also served on the GMC and its Educational Sub-Committee, and on the Medical Advisory Committee of the Committee of Vice-Chancellors and Principals. Not only was he principal planner of the new medical school at Nottingham, but he was also involved in the establishment of new medical schools in Salisbury (now Harare) in Zimbabwe, the Chinese University in Hong Kong (as member of the 'Hong Kong UGPC'), and the Sultan Quaboos University in Oman.

I succeeded Greenfield when he went to St Mary's in 1964 and inherited the department which he had built up. In 1968 we moved with the other pre-clinical departments into our new premises (Fig 4).

PROFESSORS OF BIOCHEMISTRY
The emergence of biochemistry as a separate discipline came in 1924 with the endowment of the J C White Chair of Biochemistry. J C White was a former Lord Mayor of Belfast and, as well as the Chair, he endowed the 'J C White Laboratories' to accommodate staff on the north-east corner of the old chemistry building in the main quadrangle.

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John A Milroy (Professor of Biochemistry 1925 – 34) came to Queen's in 1902 as a demonstrator in physiology along with his brother Thomas who had been appointed to the Chair of Physiology. Like his brother he was educated at Edinburgh University where he graduated MA and MD. Though he worked in the Department of Physiology his interests, like those of his brother, were mainly in physiological chemistry, and they co-authored a textbook, *Practical physiological chemistry*, which was used extensively in biochemistry practical classes as late as the nineteen-fifties. In 1909 he was promoted to a Lectureship in Biochemistry and in 1922 to a Readership. In 1925 he was appointed first incumbent of the J C White Chair of Biochemistry. Though Biochemistry and Physiology became two separate departments, the Milroy brothers continued to work together in harmony and unison. Like his brother, John had a rather quiet introverted nature but was highly respected as a scholar and gentleman and, also like his brother, held himself aloof from academic disputation in the University. His main research interest was in the biochemistry of the blood pigments. He died in 1934 in his sixty-fifth year.

Douglas Creese Harrison (Professor of Biochemistry 1935 – 67) was born in London in 1901 and was educated at King’s College London where he obtained a BSc degree in chemistry with 1st class honours in 1921. He then worked with Sir Gowland Hopkins, President of the Royal Society, at Cambridge University, obtaining a PhD in Biochemistry, and in 1926 was appointed to a Lectureship in Biochemistry at Sheffield University where he stayed until he succeeded J A Milroy in Belfast in 1935. He obtained the DSc degree from London University in 1933 and became a Member of the Royal Institute of Chemistry.

Like his predecessor, Douglas Harrison was interested in the biochemistry of blood pigments and did important work on methaemoglobininaemias and the effect of vitamin C. He also worked on tissue oxidation. His science was meticulous and scrupulous and he had, and still has, a highly developed sense of duty and of loyalty. In the latter part of his career he was heavily involved in the planning of the Medical Biology Centre, though he himself retired just as it was ready for
occupation. After retirement he continued to give invaluable service to Queen’s as Registrar and, when the office was subsumed in that of Academic Assessor in the 1981 Statutes, in the latter post, which at age 85 he still holds. In these posts he has had an ex-officio place on Senate and its Standing Committee and, in the case of Academic Assessor, also on the Board of Curators though he had been previously an elected member for many years. Here his qualities of courtesy and astuteness together with his intimate knowledge of the University and its regulations and his prodigious memory are invaluable.

Alan G Lloyd (Professor of Biochemistry 1967 – 72) had only a brief tenure of office though he saw through a great expansion of the role of biochemistry in the University. He introduced an honours course in biochemistry for science students, and biochemistry was given equal time and weighting with anatomy and physiology in the undergraduate medical and dental curricula. Everything he did was done with energy and drive, and at times he seemed a prophet of the more corporate-orientated ethos in university life. He was a Cardiff graduate who had worked in University College Cardiff and Trinity College Dublin before coming to Belfast. When he left in 1972 to become Deputy Director of the British Industries Biological Research Association, he was succeeded by Don Elmore who still occupies the chair.

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