A century of dental education: the Cork University Dental School and Hospital, 1913-2013

DR JOHN BORGONOVO and PROFESSOR DENIS O’MULLANE take us through the fascinating history of one of Ireland’s great dental institutions.

The foundation of the Cork University Dental School and Hospital 100 years ago followed a confluence of related events. Internationally, dentistry was becoming professionalised, following similar advances in modern medicine across the industrial world. Nationally, health officials in Britain and Ireland (still governed as part of the United Kingdom) were creating formal dental education and credentials via third-level institutions. Locally, University College Cork was experiencing a remarkable period of growth under perhaps the most dynamic president in its history. Together these factors produced an enduring dental education institution that has made a significant contribution to the Irish dental profession and improved dental health in Munster.

The dental school at Cork followed similar trends in dentistry and medicine around Europe and Britain during the same period. Public health became a higher governing priority in newly industrialised societies. Medical practice required more sophisticated education, and those who possessed it wanted to differentiate themselves from untrained healers. This resulted in the creation of modern medical professional education at recognised third-level institutions, and the emergence of medical registers. In British and Irish dentistry, these programmes developed in the second half of the nineteenth century. In 1860, the Royal College of Surgeons created the License in Dental Surgery (LDS) qualification. The Dentists Act of 1878 established a register of qualified dental practitioners, and two years later the precursor to the University of Birmingham started offering Britain’s first Bachelor in Dental Surgery (BDS) degrees. In Ireland, a dental school opened in Dublin during 1884, the same year the Royal College of Surgeons (Dublin) created a chair in dentistry. In 1904 Trinity College Dublin began to offer BDS degrees, followed in 1908 by University College Dublin. The clinical component of the school’s dental degrees was hosted at the Dental Hospital of Ireland (later the Dublin Dental School and Hospital), which was purpose built in 1899. Through the intercession of University College Cork President Sir Betram Windle, Cork was not long in entering the new Irish dental scene.

Foundation of UCC Dental School and Hospital

Regarded as perhaps UCC’s most influential president, in 1909 Windle oversaw the transition of Queen’s College Cork into University College Cork, as a constituent school of the new National University of Ireland (NUI). Windle strongly preferred a so-called ‘independent Munster university’ model outside NUI governance, similar to the status given Queen’s University Belfast. “Educational Home Rule” in Cork, as Windle described it, also complemented his commitment to Irish Home Rule, then the most pressing political issue in Ireland.

To strengthen his case for an independent Munster university, Windle rapidly expanded UCC. He established new chairs, schools and disciplines in such areas as archaeology, economics, education, German, hygiene, Irish, mathematical physics, medical jurisprudence, music, ophthalmology, pathology and natural history. Student
numbers climbed rapidly. In the previous 15 years the average first-year student entry was 50 students, but by 1910-1911 that number had jumped to 181. Before arriving in Cork, Windle served as Professor of Anatomy and the first dean of the University of Birmingham Medical School. There he was exposed to Birmingham’s successful Dental School and Hospital, which likely inspired his dental initiative at UCC. Although Windle ultimately failed to secure an independent Munster university, the new dental school was one of his many UCC legacies.

At this time Cork had a population of 75,000, and serviced many remote communities in the province of Munster. Qualified dentists in Cork (possessing either an LDS or BDS) competed with unregistered dentists, and were outnumbered by 20 to 14. In 1912 Windle asked the city’s registered dentists to spearhead the proposed school and hospital. Twelve of Cork’s 14 registered dentists joined the dental hospital as honorary staff, essentially running the school without pay for the next half century. Cork's early teaching staff seemed to have intended to strengthen dentistry in Cork as a scientific, ethical and respectable profession.

On March 7, 1913, the Medical Faculty of UCC approved the degree of Bachelor in Dental Surgery (BDS). Students would receive academic courses at UCC and clinical training at a newly established dental hospital. Two of the hospital staff held lectureships at UCC, which were part time and unpaid. Student clinical instruction was carried out under the auspices of the publicly financed North Charitable Infirmary (or ‘North Infirmary), located in the impoverished Shandon neighbourhood on the city’s north side. The dental hospital was situated across the road from the North Infirmary, in a converted butter warehouse (a remnant of the city’s once global butter trade) that provided only about 1,600 square feet. For lectures, students commuted from the hospital to the university. Because of the part-time status of the 12 hospital staff, students attended some lectures in the waiting room of their teachers’ private practices, of which seven were located in the South Mall in Cork.

Early years

The initial degree course offered a first year of pre-dental, consisting of physics, chemistry and anatomy; a second year consisting of anatomy, physiology and histology; a third year consisting of pathology, surgery, medicine, dental surgery, dental mechanics and anaesthetics; and, a fourth year to consist of dental mechanics, dental surgery, dental hospital practice, orthodontia and dental materia medica. A fifth year was added soon thereafter. Exams were held under the auspices of the NUI, under the external supervision of notable dental researchers from Britain. Initial students were admitted in 1913, and the first BDS qualifications awarded in 1915. Some of the early students were practising dentists seeking an LDS to join the Dental Register. The first woman qualified in 1918, while women joined the hospital teaching staff in 1925.

The dental school was founded amid the political turmoil of the 1916 to 1923 period, and shootings sometimes occurred near the hospital. Though the conflict did not directly touch the school, it did severely damage public funding options. During 1920-1922, local rate collections dropped by 50%, while economic damage caused by Crown forces and IRA guerrillas stretched Cork’s public finances to breaking point. The new Irish Free State was essentially broke, which left Cork with very scanty resources to operate a new dental hospital. Fortunately, the Cork Dental Hospital was run effectively and inexpensively. Teaching staff were unpaid, which greatly reduced costs. A stream of paying patients generated enough income to cover supplies and maintenance, while technical services at the hospital provided revenue from dentists in private practice. However, throughout this period the school and hospital survived on slim margins. Describing the hospital as “charitable rather than semi-charitable”, Dr Eric Scher noted that fees frequently went unpaid.

Hospital equipment was limited, space was confined, and there was essentially no library. During the Great Depression, new enrolment dropped to an average of two students, and no students qualified between 1930 and 1932.
A loyal staff of volunteer teachers kept the school going, usually devoting one or two unpaid mornings to the hospital. Dental lecturers in the medical faculty at UCC also served on a part-time, unpaid basis. The teaching staff seemed attracted by the prestige of association with the school, professional interest in dentistry, and an enjoyment of passing on knowledge that recalled the old days of dental apprenticeships. The hospital was run on a co-operative model, with the school dean acting as a chairman answerable to his staff, as well as the Governing Authority of the North Infirmary Hospital and the President of University College Cork. There was very little interaction between UCC and the North Infirmary.

The dominant figure in this period was Israel Scher, a founding member of the hospital who served as dean from 1933 to 1949 and brought the first dental x-ray machine to Ireland in 1922. A member of Cork’s small Jewish community, Scher established a dental dynasty. His four sons Eric, Gerald, Leslie and Ivor qualified at UCC, and three became respected dental educators in their own right. Since few of the staff possessed advanced academic credentials, the school emphasised clinical skills, which were developed through abundant student chair time. Students were relatively weak on dental theory but quite strong on extractions, dentures, fillings and crowns. High Irish poverty produced endless patients seeking low-cost dental treatment. Extensive practical training made Cork graduates immediately employable abroad.

The establishment of the National Health Services (NHS) in Britain after the Second World War fundamentally changed the Cork University Dental School and Hospital. Free dental healthcare in Britain created a high demand for dentists. Cork’s student numbers went up dramatically, with 12 first-year students registered in 1944, an increase of almost 400% from 1942. Space was found to expand the hospital to 3,500 square feet, barely enough to accommodate the ten chairs necessary for additional students. Students who qualified throughout the late 1940s and 1950s essentially became an Irish export to Britain. A number of graduating classes saw all members emigrate. Pay in Britain was very high by Irish standards, and a number of Cork dentists earned enough to return to Ireland and set up their own practices. However, rising to the challenge of the new NHS, the 1944 ‘Teviot Report’ called for standardised British dental education, including more rigorous screening of dental schools whose graduates were allowed to practise in Britain. British General Dental Council visitations tried to maintain dental teaching standards. One such visitation to Cork nearly brought the school to a premature end.

Saving the Dental School

In 1961 the British General Dental Council visitation committee produced a devastating report on the state of the Cork University Dental School and Hospital. It found that while hospital standards and professionalism were adequate, facilities were substandard. Equipment had become antiquated, there was not enough hospital space and students lacked support services. In addition, the absence of full-time, qualified lecturers was deemed unsatisfactory. The Council gave Cork four years to repair its deficiencies, or face the loss of recognition of its degree. That step would have prevented Cork graduates from practising in Britain and Northern Ireland, which would have resulted in a severe drop in student numbers and the probable closure of the school. Staffing and facility issues at the Cork Dental School and Hospital reflected wider problems in Irish higher education. A visitation report for the Incorporated Dublin Dental Hospital during the same period also demanded the construction of a new hospital and the hiring of full-time staff. The lack of full-time staff differentiated Irish and British dental education – by 1961 no British dental school had fewer than 15 full-time teaching positions (either college lecturers or hospital instructors). The use of unpaid teaching staff was not unique to Irish dentistry, as UCC’s Medical School likewise lacked full-time clinical instructors. By the late 1950s its qualification was no longer accepted in a number of states in America. Generally, Irish universities had been
woefully under-funded since the Second World War, although these deficiencies were slowly rectified in the 1960s. In 1963 school dental staff, the UCC president, and the North Infirmary Committee of Management collaborated to save the school. Representatives convinced Minister for Education Dr Patrick Hillery to commit the government to:
(a) build a new dental hospital in Cork;
(b) finance four full-time chairs in dentistry at UCC, one of which was to be the hospital’s director of dental studies; and,
(c) provide an immediate grant of £17,000 to update antiquated equipment.
Later that year Dr Hillery announced the proposed construction of a new regional hospital at Wilton, Cork (now Cork University Hospital, or CUH), which would include a new dental hospital. By 1965 the school had been further bolstered by the filling of three full-time dental chairs at UCC, and the receipt of a second government capital grant of £30,000. Much to the relief of staff and students, the critical 1965 General Dental Council visitation report recommended continued recognition of the Cork degree. However, it also warned, “the facilities for teaching dental surgery in Cork are insufficient”, and added pointedly, “there is no accommodation which could possibly be regarded as belonging to a dental school”. Future recognition would depend on the building of a new dental hospital, which, unfortunately, was still in the planning stages.
In the meantime, the school’s staff and governance changed. Professor Brian Barrett assumed the position of dean, replacing Jack Daunt, who had first joined the staff in 1918. Barrett would combine foresight with decisiveness throughout his long tenure in Cork. University College Cork also took over governance of the hospital from the North Infirmary Governing Board, setting up the new Dental Hospital Advisory Committee.
Trouble reappeared in 1967 with the long-awaited Commission on Higher Education report, which questioned building two new dental hospitals in the State. It was followed by similar recommendations in the Economic and Social Institute’s ‘Kaim-Caudle’ report. By 1972, the Higher Education Authority’s (HEA) ‘Report on University Reorganisation’ had advised the Minister for Education to retain a single dental school in the state, to be located in Dublin. The HEA report was prepared just as the Cork Hospital Board was about to invite tenders to build the Regional Hospital and Dental
School and Hospital in Wilton. Afraid that this step might commit the State to a dental hospital it did not want, the Department of Education asked the Cork Hospital Board to remove the dental component from its plans. It seemed as if the dental school was now living on borrowed time.

Fortunately, good leadership saw the school through the worst crisis in its history. University President Dr Donal McCarthy provided limited support to the dental school. However, a ‘College Working Party’, comprised of two dental staff members (Professor Brian Barrett and Finbarr Corkery), the university finance officer (Michael F Kelleher), and a member of the University Governing Body (FL Jacob) worked to refute the HEA recommendation on educational, financial and demographic grounds. Essentially, they argued that the decision was based on speculative cost estimates, would limit national dental intake to an inadequate number, and did not account for the school’s professional and public health contributions to dental health in Munster. The Working Group’s arguments were publicised, giving credible reasons to save the dental school.

Cork’s past and present students rallied to the school’s defence. Leaders of the Munster Branch of the Irish Dental Association formed the ‘Dental Hospital Retention Committee’ under the leadership of Tim O’Riordan. Dentists in Munster and elsewhere donated to a fighting fund that paid for a public relations campaign to save the hospital. Current dental students became the highly visible face of the ‘save the dental school’ campaign. In November 1973, Cork students joined Dublin dental students in a one-day strike that closed their respective hospitals, to protest the State’s failure to provide new facilities. During the following months students leafleted Cork and collected signatures for a ‘save the school’ petition. Their lab coats became a familiar presence in Cork streets while gathering a remarkable 38,000 signatures.

The Cork Dental School enjoyed unique political leverage. Valuable assistance came from the colourful Fianna Fáil TD Gus Healy, a dental technician whose constituency included the Dental Hospital. Taoiseach Jack Lynch also represented the north side and had been born near the dental hospital. After Lynch’s government fell in 1973, the critical Minister for Education portfolio eventually passed to Fine Gael’s Peter Barry, another Cork City TD. These amenable politicians represented generations of constituents who had received low-cost dental care at the hospital.

In late 1974 Minister for Education Richard Burke announced that the State would retain two dental schools, and that a new Cork dental hospital would be constructed with the new regional hospital. Planning proceeded in 1975, despite a public letter issued by the Dublin Dental Hospital staff questioning the Minister’s decision. The following year Minister Burke informed the Cork Hospital Board that construction could not begin owing to budgetary constraints. However, a new round of lobbying by school officials and students yielded a commitment from Minister of Education Peter Barry to finance the project. The building was ultimately completed in 1981, though a fire destroyed much of the structure during the moving in process, causing £375,000 in damages. After repairs, the new hospital at Wilton opened on March 5, 1982.

Making a modern dental school

The Cork University Dental School and Hospital used its Wilton facilities as a springboard into new areas of dental education and research. The single location allowed for the integration of different educational programmes, much to the benefit of each unit.

The training of dental nurses developed in Britain in the 1940s, but did not begin in Cork until Professor Louis Buckley initiated a programme in 1971. Over the next 20 years, Elish O’Mahony expanded the dental nursing course, which now exists as an 18-month (part-time) diploma. Since 2004, the National Dental Nurse Training Programme of Ireland (NDNTP), jointly operated by the Cork and Dublin dental schools, has provided remote dental nursing education to facilitate students living outside Cork and Dublin. In 2009, Cork began a clinical training initiative to allow student dental
nurses to gain their clinical experience at the Cork Dental Hospital, rather than as trainee nurses in practice. Currently the school has 32 dental nursing students undertaking a diploma on site, and an additional 10 at the Waterford IT outreach centre. In 1993, Cork opened the School of Dental Hygiene, with Professor Buckley as its first director and Anne O’Keefe as tutor. The two-year full-time programme features both classroom and clinical components undertaken at University College Cork and the Cork Dental School. Today, 14 first-year hygiene students are enrolled at Cork. Cork has served as a regional centre of professional development since the school’s foundation. The school maintains an ambitious continuing professional development programme of forums, seminars and special clinics. The school uses both its facilities and personnel to provide educational services to dental practitioners across Munster. Cutting-edge research conducted at Cork has improved the school’s educational programmes, and dates back to the State’s first fluoridation efforts. The Health (Fluoridation of Water Supplies) Act of 1960 directed local authorities to add fluoride to water supplies, but also mandated regular monitoring to detect any reduction of dental decay. In 1965 the Department of Health established the new ‘Special Studies in Dental Caries and Fluorides’ unit in the UCC Dental School and Hospital to undertake this monitoring. Headed by Dr Chris Collins, the ‘Special Unit’ started a tradition of important epidemiological dental research undertaken in Cork. Epidemiological research advanced through the opening of the Oral Health Services Research Centre (OHSRC) in 1983, under the direction of Professor Denis O’Mullane, and now located in a separate structure adjoining the Dental Hospital. The OHSRC completed the Department of Health’s 1982 National Survey of Children’s Dental Health, to measure the long-term effectiveness of water fluoridation. The Centre also undertook the third National Survey of Children’s Dental Health in 2002. From 1984 to 1994, the OHSRC engaged in several dental epidemiological studies on behalf of the EU, industry and individual health boards throughout Ireland. Since 1987, the OHSRC has been designated a World Health Organisation Collaborating Centre, and is regarded as one of Europe’s most successful dental research units. The current President of the International Association for Dental Research, Professor Helen Whelton, has served as the OHSRC Director since 2005. In recent years Cork University Dental School and Hospital has developed a strong reputation for high-quality research in a number
of areas, including prosthodontics, dental materials, orthodontics, and paediatric dentistry. Much of this research has a clinical focus, with numerous randomised controlled clinical trials completed within the Dental Hospital. The school enjoys a particularly high international profile in geriatric oral research, based on significant grant income, high-quality publications, and multi-disciplinary and collaborative research conducted at the national and international level. Recent recognition includes Professor Finbarr Allen’s 2011 Distinguished Scientist Award in Geriatric Oral Health, given by the International Association for Dental Research. In 2012, Dr Gerry McKenna won both the Senior Clinical Hatton Award from the International Association for Dental Research, and the GABA Research Prize from the European College of Gerodontology.

Advanced research has also bolstered Cork’s postgraduate degree programmes. The school has developed the popular Masters Degree in Dental Public Health (MDPH), and opened the Postgraduate Orthodontic Centre in 2006. It also offers a taught Doctorate in Clinical Dentistry (Oral Surgery and Orthodontics), while the OHSRC currently hosts eight PhD students. Many former Cork researchers now occupy senior positions in the academic and services field in Ireland and overseas.

The next century
The current Cork University Dental School and Hospital would likely have exceeded the expectations of even the most optimistic of the school’s founders. The school caters to 225 BDS students and 20 postgraduates. The hospital operates a 90-chair facility, and is equipped to deliver both advanced dental education curricula and specialised dental services. Entering its second century, the Cork University Dental School and Hospital faces a national crisis in public funding. However, like his predecessors, school dean Professor Finbarr Allen retains skilled part-time and full-time staff members who are devoted to the institution. The institution’s history has demonstrated that with such material even the most serious challenges can be overcome, to ensure that Cork continues as a leader in Irish dental education.

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Can you help?
The authors are currently writing a history of the Cork University Dental School and Hospital, to be released as part of its centenary celebrations. They ask that anyone possessing photos, documents or other material relevant to the history of the school, please contact the authors at uccdentalhistoryproject@gmail.com.

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