no ordinary SPACE

Joe Cain

occasional papers
Department of Science and Technology Studies
No Ordinary Space
Historical Notes
on the
Grant Museum of Zoology’s
new home
at University College London

Joe Cain
The Department of Science and Technology Studies publishes STS Occasional Papers to disseminate current research undertaken by our staff and affiliated scholars. The aim is to inform, investigate, and provoke. The series covers the whole of our diverse field: history, philosophy and sociology of science, science policy, and public engagement of science.

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Image on front cover: Tiger skeleton on display in the relocated Grant Museum of Zoology, 2011.

Image on frontispiece and back cover: Paul Waterhouse’s 1907 University College Hospital Medical School (UCL’s Rockefeller Building) on University Street, between Huntley and Gower Streets. The Thomas Lewis Room, the Grant Museum’s new home, is on the ground floor.
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List of Abbreviations

UCL University College London, used here to refer to the university generally, without distinguishing the various corporate titles in its evolution: University of London, University College, etc.

UCH University College Hospital, used here to refer to the organisation, rather than to any particular building.

UCH1 1828 building, later expanded, built for University College Hospital. Also know as North London Hospital. Demolished, replaced by UCH2.

UCH2 1906 Alfred Waterhouse building, built for University College Hospital. Currently known as UCL Cruciform Building. This replaced UCH1.

UCHMS University College Hospital and Medical School, used here to refer to the organisation, rather than any particular building. Formally constituted in 1905, dissolved with the launch of the National Health Service in 1948.

1907 Waterhouse Building Currently known as UCL Rockefeller Building, comprising the 1907 UCHMS wing, Nurses’ Home, and Maternity Students’ Home, Paul Waterhouse, architect.
Preface

When I heard the Grant Museum of Zoology and Comparative Anatomy was to move into the Rockefeller Building’s “Thomas Lewis Room,” I took a great interest in the history of this space. I love London’s architecture, and I love to rediscover the stories hidden in every nook and cranny. This new space for the museum certainly has a fascinating history. Not only is it a grand Edwardian library, but it also encapsulates many of the larger events taking place along Gower Street. The purpose of this booklet is to collect some of that history into one place.

No scholar is an island. Thanks go to Andrea Fredericksen, Emma Chambers, Mandy Wise, Dan Mitchell, Kate Cheney, Jack Ashby, Mark Carnall, Gillie Newman, Natasha McEnroe, and especially to Rita Dockery. Thanks also to three students who gave useful advice: Nissa Black, Deborah Waller, and Lucy Collins. Thanks to the Department of Science and Technology Studies, for contributing to printing costs.

Joe Cain
May 2011
Figure 1
Gower Street, hospital, and university before the big changes. This 1896 map shows the properties to be demolished for construction of the 1907 Waterhouse Building (now UCL Rockefeller Building) on south side of University Street at Gower Street. Also shows the first University College Hospital (UCH1), see also Figures 26 and 27, prior to demolition and replacement by 1906 University College Hospital (UCH2), today known as UCL’s “Cruciform Building,” by Alfred Waterhouse (UCH2). Source: Ordnance Survey. 1894-96. Extended Series. 1/1056. London Sheet VII 42.
A New Medical School

The Grant Museum’s new home is no ordinary space. Known today as the “Rockefeller Building,” this facility has a history that ties it to some of the most important developments in UCL science. It also is closely tied to the history of the hospital and medical school that have been associated with the university since the 1820s.

The building itself began life as “University College Hospital Medical School” (UCHMS). The foundation stone was dedicated on 11 June 1906. The building officially opened on 02 September 1907.

UCHMS was both new and old. Formally it was a new organisation, coming into existence in 1905 as part of some shifting around of the medical training provision in and around the university. UCHMS included the hospital and the clinical training programme. It deliberately did not include the academic departments in medical sciences (physiology, pharmacology, anatomy, etc.). Those were parts of the university. A new building for UCHMS was intended to support clinical training as a priority.

Although formally new, UCHMS simply was an expansion of the medical training provision long associated with

Figure 2

Figure 3
Foundation stone of 1907 Waterhouse Building, located on west wall of the Library. The stone can also be seen in Figure 30 on the right side of the Library, in the bookshelf at eye level. This stone is visible today.
Currie’s generosity towards UCH was a matter of luck rather than design. He had no long-standing connection with the university or the hospital. His inspiration to become a benefactor came, he said, because it was in UCH that he recovered from a grave illness. Currie was attended by UCH Assistant Physician Dr Harold Batty Shaw, a man widely remembered for his compassionate style. After recovering, Currie asked his physician what gift might be appropriate to show his gratitude. “A new medical school,” Shaw replied (Merrington 1976: 96).

After a bit of negotiation, Currie offered £80,000 for that new medical school, plus £20,000 for a new nurse’s home.

Curiously, a similar story about patronage is told of Currie and the refurbishment of Dunkeld Cathedral (Perthshire) in 1908. As it happened, one of the nurses who looked after Currie during his later illnesses happened to be the Minister’s daughter. When she was asked to suggest a gift in recognition for her own efforts, the nurse pointed Currie to the needs of her father’s cathedral (Gazetter 2010).

Currie’s generosity towards UCHMS is commemorated in several ways. His coat of arms (castle over galley on a field of gold and blue) was placed over the building’s entrance on University Street (Figure 4). His portrait was hung in the Library...
of the new building (Figure 2), and the frame of his portrait was topped with the shield from his coat of arms (Figure 5). Currie laid the building’s foundation stone, too, and this remains visible in the Library (Figure 3). A bust of Currie, sculpted in 1884 by Thomas Woolner (UCL Art A85/737), was placed in the Library after Currie’s death, but this was not in the original plan for commemorating his patronage.

Because Currie was one of two benefactors active at the moment UCHMS was formed, a trace of his influence appears in the UCHMS coat of arms. This was granted formally by the College of Heralds in 1907 (Figures 6 and 7). Obviously in homage, an “ancient galley proper” was included (Dunn 1954). Two maple leaves set above the galley on the shield are traces for the other patron hospital and medical school, Sir J. Blundell Maple. He contributed substantially to the building of the 1906 hospital (UCH2, now the UCL Cruciform Building).

For the 1907 new UCHMS building, Currie paid construction costs. Other funds were used to complete the project. Most of the land along University Street, for instance, was purchased in 1903 through an anonymous alumni gift of £50,000. That donor remains unidentified.

Figure 5
Decoration on frame for portrait of Sir Donald Currie. Shield from his coat of arms. This frame is located on the south wall of the Library. It is visible today.

A row of eleven terraced houses on University Street, dating from the 1780s, and part of Chenies Mews, were demolished to make way for the new building (Figure 1). Scharf’s 1835 sketch shows the terraces along Gower Street at the intersection with University Street (Figure 27). These appear similar to the row of terraces now located on Gower Street at its intersection with Torrington Place. They were demolished to make way for the 1907 building.
Paul took primary responsibility for it, and the overall architectural style of this second project was his. It departed significantly from his father’s preference for Gothic revival.

Paul’s described his design for the 1907 building as a “fairly severe Classic treatment,” a style chosen to express not only the purpose of the building but also “its dignity as a public institution, and as the outcome of an act of stately generosity on the part of the distinguished donor.” The classical frontage on Gower Street (frontispiece) echoes both the UCL Wilkins building (then, easily visible to visitors in the Medical School) and the frontage lost with the demolition of the original hospital (UCH1, see Figures 26 and 27). Portland stone and red Bracknell bricks dominate the facade (Waterhouse 1907; UCHMS 1908).

The facade also was shaped by practical features. Along University Street, for instance, significant amounts of the frontage was given over to glass (Figures 8 and 10). As Waterhouse explained, “the design has been largely governed by the fact that large windows were required - with a maximum glass area for the lighting of the large chemical, bacteriological, and histological laboratories.” The ordinary entrance was on University Street. The Gower Street entrance was intended only for grand, “state” occasions. This

**Figure 6**
UCHMS coat of arms, designed by Rickman Goldee and granted in 1907. Motto: Let not the seeker relinquish the search. Source: Dunn (1954). Another copy is located over the ground floor lobby entrance to the UCHMS wing.

**Paul Waterhouse, Architect**

The 1907 building was designed by Paul Waterhouse (1861-1924), son of the famous Gothic revival architect, Alfred Waterhouse (1830-1905). Paul joined the family firm in 1891. The 1906 hospital (UCH2) was the firm’s first project on Gower Street. Paul played an important role in the completion of this project, but the 1906 building certainly was his father’s design. The 1907 building was the Waterhouses’ second project on Gower Street.
repeated the pattern of use in UCH1 late in the 19th century, when a side entrance leading onto University Street served as the *de facto* main entrance to the building.

Curiously, Waterhouse’s 1907 building unified *three* facilities within a single facade. Over the University Street entrance the signage read, “University College Hospital Medical School”. This is plainly visible today (Figure 9). The Medical School’s wing included the whole east wing of the building, plus a south wing located in the centre of the range extending into Chenies Mews. Meeting rooms and offices dominated the ground floor. A grand library was placed along the whole length of the Gower Street side of the east wing, reaching into the first floor via an open balcony. Classrooms filled much of the basement. On the first floor was the Forensic Medicine Museum, a demonstration theatre, and a “commodious histology lecture theatre and laboratory” accommodating 60-70 workers. Offices, research laboratories, and infrastructure occupied the upper floors (UCHMS 1908: xlvii-xlix, 28-29).

The west wing of Waterhouse’s 1907 building comprised the Nurses’ Home, funded by Currie in his original donation. Over the Huntley Street entrance a sign reads, “Nurses’ Home” (Figure 11). This facility was intended for nurses working in the hospital, including both employees of the hospital as well as nurses employed by private patients treated therein. The home provided 70 bedrooms, plus several rooms for nurses “who have fallen ill during discharge of their duties”. In addition, dining and sitting room facilities were provided. The sitting room was supplied with a piano and library gifted from Currie’s three daughters (UCHMS 1908: xlvi). Nurses were accommodated here until the 1930s (see below).

The third facility in Waterhouse’s 1907 building was sandwiched between the Medical School and the Nurses’ Home. This was the Maternity
Students’ House. Its unmarked entrance can be found midway between the Medical School’s entrance and the building’s end at Huntley Street. (Figure 13; notice the differently shaped windows on the ground floor; there is no signage.) This house accommodated two obstetrics assistants and six students who attended maternity cases in the neighbourhood of the hospital. It occupied a small portion of the ground, first and second floors. This house was relocated.
presumably for private patients in the hospital. A tunnel connected the Nurses’ Home to the hospital (UCH2) across the street.

The multiple demands on this site clearly frustrated the architect (Waterhouse 1907). He complained the project’s greatest challenge involved marrying quite different types of spaces - large rooms for library and lecture theatres to the east, then small rooms for residence to the west - into a single, coherent façade. His use of Portland stone creates the necessary sense of continuity. A passerby quickly glancing at the building might

in the 1920s, when the Obstetrics and Maternity Hospital opened on Huntley Street.

Also in the 1907 building was accommodation for a housekeeper and several servants,

Figure 10
UCL Rockefeller Building, northwest corner at intersection of Huntley Street and University Street. Entrance to Nurses’ Home on right (Huntley Street). Beyond on Huntley Street is UCL Cancer Institute.

Figure 11
Sign above Huntley Street entrance of UCL Rockefeller Building. This sign dates from 1907.
Figure 12 (above)
UCL Rockefeller Building at University Street and Huntley Street. Circa 1930-1939. Nurses’ Home in foreground. This shows refurbishments funded by Rockefeller grants.
Source: UCL Library Services, Special Collections 7176.

Figure 13 (left)
UCL Rockefeller Building. Door on University Street marking entrance to the Maternity Students’ Home.
never notice the vast differences in shape or function between east and west wings. To that extent, the design was a success.

Waterhouse emphasised his use of the most modern features in the building. This included electric light to illuminate the building, and radiators to heat it (Figure 30). Today, such details are easy to overlook. Waterhouse’s intent was to make use of the day’s cleanest technologies. As an added bonus, Professor John Ambrose Fleming, UCL’s famous electrical engineer, served as the project’s “Honorary Electrical Adviser”.

Waterhouse’s design was not universally applauded. Pevsner described it as “baroque and ridiculously grand” (Cherry and Pevsner 2002: 265). Merrington (1976: 99), who worked in the building for many years, complained the facade “was unfortunately not entirely suited to what went on inside.” The grand entrance seemed “pointless”. The library space was “very impressive [but] rather inefficient”. The east wing simply failed to impress.

“Both the library and the museum, thought at the time to be suitably imposing, are vast caverns into which a succession of the best
medical minds have tried unsuccessfully to fit two more floors.” (Merrington 1976: 99)

Other science buildings designed by Paul Waterhouse include extensions to the Manchester Museum (from 1911) and the Dyson Perrins Laboratory in Oxford (1913-1916, Figure 14). Stylistically, the former followed his father. The latter, designed with far fewer surrounding constraints, echoes the 1907 Waterhouse Building and shows similar practical accommodations for science.

Partner to the Cruciform Building

The 1907 Waterhouse Building followed on the heels of the new hospital (UCH2), known today as UCL’s Cruciform Building. Begun in 1897, with planning underway for at least a decade beforehand, UCH2 formally opened in 1906. Portions of UCH2 were occupied as early as 1900. The last wing of its predecessor (UCH1, see below) was demolished in 1902.

UCH2 was financed largely by Sir John Blundell Maple (1845-1903), a millionaire businessman who ran a successful furniture and furnishings business on Tottenham Court Road and who was a successful investor in racehorses. Moorhouse (2004) notes Maple’s estate exceeded £2.1 million at the time of his death.

In 1897, Maple committed to funding the new building, offering up to £200,000. Additional funds to complete the project were raised from alumni contributions and from UCL’s sale of the small strip of land it owned between the university and hospital (Merrington 1976: 60). The London County Council purchased this to extend Gower Street north to meet Euston Road.

UCH2 was designed principally by Alfred Waterhouse (1830-1905). This was Alfred’s last major commission. Other major Alfred Waterhouse buildings in London include: Holborn Bars (home of the Prudential Assurance Company, 1877), Natural History Museum (1881), National Liberal Club (1887), British Institute of Preventive Medicine (now The Lister Hospital in Chelsea, 1895) and Royal Institution of Chartered Surveyors (Great George Street, 1896).

Key to UCH2’s design was a plan devised by Dr. George Vivian Poore (1843-1904) (Figure 18). Poore was a UCH physician particularly concerned with problems of hygiene and sanitation, exemplified in his book (1897) The Dwelling House. He also played significant roles in the formation of UCHMS as an organisation. Poore’s proposal emphasised the importance of isolation between wards and the need for improved ventilation and lighting. The cruciform diagonal shape to the floor plan
vastly increased the building’s surface area. This gave room for windows and cross breezes in every ward. Poore said this design was based on the St Andrew’s Cross. As Paul Waterhouse liked to stress, the cruciform design was one sense in which UCH2 had been “built on the most modern principles” (UCHMS 1908: xlvi).

Making Room for Medical Sciences

These two Waterhouse buildings were built in a decade of significant changes occurred at the same time elsewhere, too.

In essence, “scientific medicine” was on the rise. Formal training in science was growing in the curriculum. Research was becoming integral to medical practice and surgery. These changes were consistent with the rise of laboratory and experimental methods across all the sciences in the last decades of the 19th century.

UCL offers an exemplar of these changes. The university’s building programme in the decades around 1900 illustrated the effects of these new methods. Labs and experimental methods have special needs as far as architecture and infrastructure was concerned. New buildings
were needed to accommodate. UCL’s Physiology Building (1909) was constructed immediately after Waterhouse’s 1907 Medical School. Then, UCL added a new chemistry building (1912-13, later dedicated to Kathleen Lonsdale). More buildings were on the way, with the Great War slowing construction down only slightly (Figure 24).

The growth of research and fundamental science strained the formal relationship between
hospital, medical school, and university. The view that science provided the fundamentals for medical education might have been dominate at the university. However, medical practitioners in the hospital had an apprentice model for education that treated the subject more as a craft or guild. These two approaches came into conflict around UCH’s teaching programmes. On one side, scientific training and fundamentals of laboratory practice were the foundation upon which medicine was built. On the other side was the view that while textbook and laboratory knowledge of chemistry and physiology might set an overall frame of mind, these were of little use when setting a fracture or undertaking surgery.

Questions of relative balance also provoked tensions over certification. Who had the right to set standards for doctors and surgeons? On one side, the University of London had degree granting powers. On the other side, professors in clinic skills at

Figures 16 and 17 (opposite page)
Alfred Waterhouse’s 1906 University College Hospital (UCH2).

Figure 18 (left)
Medallion of George Vivian Poore (1843-1904), Source: UCL Art A85-743.

Figure 19 (right)
Medallion of Christopher Heath (1835-1905), Source: UCL Art A85-744.

Both medallions are located in the UCL Rockefeller Building, University Street foyer.
UNIVERSITY COLLEGE HOSPITAL.
MEDICAL COLLEGE SCHOOL.
(Under the London.)
WINTER SESSION, 1908-9, BEGINS on FRIDAY, October 2, 1908.
UNIVERSITY COLLEGE HOSPITAL MEDICAL SCHOOL comprises Departments of Medicine and Clinical Medicine, Surgery and Clinical Surgery, Midwifery and Gynecology, Pathology and Morbid Anatomy and Clinical Pathology, Bacteriology, Mental Physiology and Mental Diseases, Dental Surgery, Practical Physic, and other Departments for the study of Special Diseases, such as those of the Eye, Skin, Ear, and Throat, and for instruction in the use of Anesthetics, and in Electro-Therapeutics and the application of the X-rays.

ENTRANCE.
A Student may enter the School as soon as he has passed the University of London Matriculation Examination, or one of the other Preliminary Examinations that qualify a Medical Student for entering a Medical School. In this case he will pursue his Preliminary and Intermediate studies at University College, and when these are completed will carry on his Final Medical Studies at University College Hospital Medical School. The Student who, in addition to having passed a Matriculation or other Examination, has completed his Preliminary and Intermediate Medical Studies at University College or elsewhere, may enter the University College Hospital Medical School for his Final Medical Studies only. Qualified Medical Men and others who can produce evidence of sufficient qualifications may be admitted to Special Departments for the purposes of Research, or to Hospital Practice for certain definite periods.

FEES.
The Preliminary Scientific Course at University College, 90 Guineas.
Intermediate Course at University College, 56 Guineas.
Final M.B. Course at University College Hospital Medical School, 90 Guineas if paid in one sum, or 52 Guineas paid in two instalments of 50 and 32 Guineas.

UNIVERSITY COLLEGE HOSPITAL has, through the munificence of Sir Donald Currie, G.C.M.G. LL.D., been rebuilt and extended in accordance with the requirements of modern Sanitary Science. The new Hospital accommodates 350 Patients and possesses extensive Out-Patient and Special Departments.

Thirty-six Clinical Appointments, Eighteen of which are Resident, are filled up by Competition during the year, and these, as well as all Clerkships and Dresserships, are open to Students of the Hospital without extra fee. The Hospital is now complete and was formally opened by H.R.H. the DUKE OF CONNAUGHT on November 6, 1908.

THE NEW MEDICAL SCHOOL BUILDINGS, erected through the munificence of Sir Donald Currie, G.C.M.G. LL.D., were opened in October, 1907. Included therein are three large Laboratories for Bacteriological, Histological, and Pathological Chemical Investigation, a large Pathological Museum, and a Library containing about 3,500 volumes. There are also large Demonstration Theatres and Lecture Rooms, and a thoroughly equipped Operative Surgery Department. Commodious Students' Rooms are provided, including a large Gymnasium, with Baths attached, and are controlled by the Medical Society, which is officered by Students.

Provision is made in both the Hospital and School for the work of the Undergraduate Student, and for that of the Post-Graduate and Research Student.

PROFESSORS.
Medicine
J. R. BRADFORD, M.D. F.R.C.P. F.R.S. D.S.
Sir THOMAS BARLOW, Bart. K.C.V.O. M.D.
J. P. BRADFORD, M.D. F.R.C.P. F.R.S.
SIDNEY MARTIN, M.D. F.R.C.P. F.R.S.
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SIDNEY MARTIN, M.D. F.R.C.P. F.R.S.
Ophtalmic Medicine
PERCY FLEMMING, B.S. F.R.C.S.
Scholarships and Exhibitions of the value of £50l. are offered for competition annually.
The Athletic Ground is at Perivale, within easy access of the Hospital. Prospectus, with all information as to Classes, Scholarships, etc., may be obtained from the Dean, University College Hospital Medical School (Gower Street, W.C.).

H. BATTY SHAW, M.D. F.R.C.P., Dean.
LEONARD R. THOMAS, Secretary.
the hospital thought themselves better judges of any qualification to practice. They held their authority through professional licensing. The two systems could not run in parallel.

In 1898, efforts began on Gower Street to separate the first elements of medical studies away from final clinical studies. As happened elsewhere, such as at Johns Hopkins University in the United States where the same problems were confronted, medical training was split into two halves at UCL: science first, then clinic. In this plan, medical education began with the university’s curriculum of anatomy and physiology, under “medical sciences”. Then, clinical work developed practical skills and “advanced medical training”.

This resolution was embedded with changes in the formal organisation of both UCH and UCL. Thus, in 1905 the hospital and clinical training programme were unified formally into “University College Hospital and Medical School” (UCHMS). At the same time, the preliminary and intermediate elements of the curriculum were shifted to medical sciences departments within UCL. (For particulars, see UCHMS 1908 and UCL Act 1996.) The 1906 and 1907 Waterhouse Buildings provided new facilities for the second level of this sequence.

UCHMS functioned as a single
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corporate body between 1907-1948. When the 1946 National Health Service Act came into force, hospital and medical school were separated again. The medical school returned to the university as an independent unit (UCL Act 1996).

**Why Rockefeller and not Currie?**

Despite Currie’s patronage, Waterhouse’s 1907 Medical School is known today as UCL’s “Rockefeller Building”. This attribution came in the 1920s after UCL and UCHMS received major support from the Rockefeller Foundation. In total, grants of more than £1.2 million were received. This was an extraordinary amount of money at the time.

The Foundation wanted to significantly improve medical education in the UK, and it chose UCL for its flagship. Preferring the “medical sciences” side of the argument regarding medical curriculum, the Foundation sought to ground medicine squarely in experimental and laboratory knowledge. In the lofty words of formal announcements, the funding sought to establish “a medical educational centre of such standing and prestige as would secure the circulation of new ideas and methods throughout the British Empire.” In plainer language, the goal was to create a footing based on modern science.

In total, the Rockefeller Foundation provided £400,000 for building programmes, £435,000 for maintenance, and £370,000 for medical teaching and research so that the teaching could be put on “a scientific basis” (Merrington 1976: 124). For UCL and UCHMS, see Blacker (1921),

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**Figure 22**

Choyce (1921), Vincent (1921), and UCHMS (1935). On the Rockefeller Foundation more generally, see Kohler (1982).

Rockefeller funding led to a massive expansion in facilities across UCL and UCHMS. Several new blocks of accommodation for nurses were built, so were a new Obstetrics and Maternity Hospital, the Royal Ear Hospital, and a dental hospital. The UCL Anatomy Building was constructed from Rockefeller funds, too. The label “Medical Sciences” was engraved above the entrance to this building in deference to the underlying ideology. King George V opened it in 1923.

Using Rockefeller funding, the 1907 Waterhouse Building was transformed. With new accommodation built nearby for nurses, the Nurses’ Home was absorbed by UCHMS. Research facilities were expanded for pathology, bacteriology, and biochemistry. Some of these expansions have since been demolished to make room for the UCL Cancer Institute’s Paul O’Gorman Building, 72 Huntley Street. That new building opened in 2007 (Compare Figures 10 and 12).

Following on the same momentum, other facilities grew up at UCL for biomedical and experimental sciences. By the middle 1930s, UCL and UCHMS were quite different places compared with twenty years previously (Figure 24). Rockefeller support was essential for that transition.
Figure 24
Block Plan of University College
London, circa 1937. Source: UCL
Library Services, Special Collections
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Before the Cruciform Building

Alfred Waterhouse’s 1906 Cruciform Building (UCH2) replaced an earlier hospital on the same site (UCH1, Figures 26 and 27). Its name often causes confusion. When first built, the facility was known as “North London Hospital”. Within the university, especially after it received a charter of incorporation in 1836, the hospital came to be called “University College Hospital” owing to its close ties with university faculty and students. Both names were widely used.

In 1851, hospital officials hoped to solve the confusion by adopting the name, “North London or University College Hospital”. That didn’t help.

The Medical School’s official history places the start of its hospital in 1828, when the University Dispensary started at No. 4, George Street, Euston Square. (George Street was renamed “North Gower Street” in the late nineteenth century during a rationalisation of the streets by the London County Council, see Cruchley 1827.) Intended to give hands-on training as part of clinical instruction, the Dispensary was managed by the University’s Council. It was staffed by four college professors and the Demonstrator of Anatomy (UCHMS 1908: xlv). Post mortems were conducted by the resident apothecary. Lectures for medical students were accommodated off the north cloisters of the Wilkins Building in facilities long since demolished.

Figure 25
UCH Residents 1881-82. Source: UCL Library Services, Special Collections 12045.
The “North London Hospital” was constructed as a private venture, begun in 1833. Founded for “the relief of poor sick and maimed persons, and the delivery of poor married women at their own habitations,” it was supported by voluntary contribution. This was located on Upper Gower Street, across from the main college entrance, on the site now occupied by UCH2 (see UCH annual reports, e.g., “Report for the Year 1897”, published in 1898.) A north wing was added in 1838; a south wing in 1846. Merrington (1976) provides a floor plan for the hospital in its final form. A summary of UCH1’s architectural history is provided in the Survey of London (1949).

The pencil sketch of Upper Gower Street by George Scharf (1835) shows UCH1 with the 1834 building’s entrance on the west side of Gower Street (Figure 27). On the east side of Gower Street are two porter’s lodges and the Wilkins building.

As shown in Scharf’s sketch, a barrier across the path marked the north terminus of Upper

**Figure 26 (above)**
North London or University College Hospital (UCH1). This photograph presents the building in its final form, as it appeared at the end of the nineteenth century before demolition occurred. The view is from within UCL’s quadrangle across Gower Street. A floor plan is provided in Merrington (1976). UCH1 was replaced by the Alfred Waterhouse 1906 building (UCH2). Source: UCL Library Services, Special Collections 33442.

**Figure 27 (next page)**
Pencil sketch of Gower Street by George Scharf (1835). Looking south on Gower Street from intersection of Upper Gower Street and Grafton Street. UCH1 on right (west); Wilkins Building on left (east). Source: UCL Library Services, Special Collections 33447.
Gower Street and the start of university property. This proved a hazard at night to carriages and riders. It was removed in 1892 when the university sold the path to London County Council while raising money for UCH2 (PF 1911). The sale of this path finally allowed city planners to create a throughway from Gower Street to Euston Road.

Upper Gower Street was built in the 1780s as an expansion north from Bedford Square. Less elegant than the houses on Gower Street south of Torrington Place, these terraces served principally as rented accommodation and boarding houses. Booth’s (1902-1903) socioeconomic survey of 1898-99 identified the Gower Street terraces as “middle class, well-to-do”.

**Bombing During World War Two**

The Waterhouse 1907 building shows scars from the Blitz. Though London parishes to the south and east received by far the heaviest bombing, St Pancras and Marylebone parishes were targeted frequently. The worst for UCL and UCHMS came in two waves.

In September 1940, the Great Hall (on Gordon Street, next to Figure 28

UCL Wilkins Building. View from roof after bombing during September 1940. Source: UCL Library Services, Special Collections 5146.
what now is the Bloomsbury Theatre) was destroyed in a direct hit of high explosives. The Wilkins Building was heavily damaged, as were buildings just north of UCH2 (Figure 28). Debris from that night’s explosions sprayed the area, including Gower Street. The resulting scars (more precisely, repairs to those scars) are easy to identify in the stone around the entrance on Gower Street (Figure 29).

On the night of 16-17 April 1941, German incendiary bombs fell in the area. These destroyed buildings along Gower Street on land now occupied by UCL’s Darwin Building (so named because Charles and Emma lived in a house on this site 1839-1842). They also caused severe damage to the National Central Library facility in Gower Mews. This building later became the DMS Watson Science Library. The South Cloisters wing of the Wilkins Building also was damaged extensively that night (Saunders 2005).
In Waterhouse’s original design for his 1907 building, the Library occupied the east end of the building (along Gower Street) on the ground and first floors (Figure 30). The stately entrance from Gower Street opened directly into the library (Figure 29). A porter’s room, or librarian’s office, was built into the south side of the entrance; a staircase leading to the balcony was built into the north side of the entrance. An open balcony on the first floor provided high ceilings and large windows.

The Library’s balcony was decorated with twelve busts of eminent men associated with UCH and medicine or surgery at UCL (see Appendix for a directory of these busts). These were not specially commissioned for the room; rather, they were selected from among the busts available in the Medical School at the time. It’s not known why these busts, rather than others available, were selected for so prominent a position. Some of the choices are predictable; others, peculiar.

For portraiture, a fine oil painting of Sir Donald Currie hung centred on the south wall.
The frame was decorated with the shield from his coat of arms (Figure 5). Other portraits also sometimes hung in the library; however, their arrangement followed no master plan. Over the years, new portraits and sculptures were added to the library and to the ground floor corridor of the building. At least eight additional busts were displayed over the years. For instance, a bust of Currie (by Thomas Woolner in 1884 UCL Art Collection A85/737) was added later to the Library. In 1985, other busts included Roy Cameron (1965), Robert Fellowes (1835), William Sharpey (1871), Charles James Blasius Williams (1874), and a second bust of Robert Liston. Nearby, marble medallions were hung to commemorate Christopher Heath (1835-1905) and George Vivian Poore (1843-1904) (Figures 18 and 19). In contrast to the busts, the medallions of Heath and Poore were specially commissioned for the building. They were set into the wall in the UCHMS central stairwell.

The “Medical School Library” functioned as an academic and lending library from 1907 until 1999 (Campbell and Cheney...
The service had its ups and downs. In the shortages following World War 2, for instance, textbooks were hard to come by. Lending rights were rationed, which led to many complaints especially from undergraduates restricted to using one book at a time. Other complaints focused on the room’s fitness for purpose as a library. For reading, it often was too dark. Most books seemed inaccessibly placed on shelves well above eye level (note the ladders in Figure 31). And as with all open plan spaces, minor disturbances anywhere in the room seemed to create disruption everywhere.

The Library also served as a venue for social functions. Official UCHMS functions included Royal visits and sessional openings. Less officially, club activities included galas and variety shows as well as routine meetings and discussion groups. This pattern of dual use continued until the Huntley Street “club house” opened in 1964 (Hollins and Hutchin 1964). Sometimes the social functions dominated the reading room, leading to the regular complaint that the space, in fact, was an assembly hall and ballroom only occasionally arranged for library patrons (e.g., Anonymous 1961).

In September 1999, the Medical School Library moved. During the late 1990s, UCL refurbished UCH2 to create new facilities for teaching and research within the Medical School. As part of this refurbishment the library was moved into the basement of UCH2.

With the departure of the Medical School Library in 1999, the library room was converted into a non-smoking common room for medical students. Commemorative lists identifying various club officers, hanging on the west wall, date from the 1990s and 2000s.

Who was Thomas Lewis?

The Library was never formally dedicated as “The Thomas Lewis Room”. This attribution grew up following the Library’s removal.

The likely reason for the attribution is simple: a memorial plaque to Lewis is quite prominent in the room (Figure 35). Plus, his portrait hung in the room, and Lewis was one of the legendary figures of UCL medical sciences. It’s an easy association to make.

Sir Thomas Lewis (1881-1945) was an eminent physician and physiologist. Born and educated in Cardiff, he studied at UCH, 1902-1905. His early work focused on the electrical nature of heart rhythm, using a new type of electrocardiograph. Lewis’s 1911 monograph, *The Mechanism of the Heart Beat*, established his reputation in the study of
rhythm disorders, such as atrial fibrillation (Figures 33 and 34). It also demonstrated his skilled, experimentalist hands and his focus on physiological explanations for clinical phenomena.

Lewis founded the journal *Heart* in 1909 (in 1932, it broadened and the name changed to *Clinical Science*) as an outlet for clinical research into cardiac problems. He also helped establish the Department of Clinical Research in 1930, funded by the Medical Research Council and the Rockefeller Foundation. Lewis also helped found the Medical Research Society in 1930.

He was elected FRS (1918) and became full physician at UCHMS (1919). Lewis was awarded the Royal Society’s Copley Medal in 1941 for his “application of precise and controlled methods of experimental research to problems of clinical medicine,” especially to rhythmic waves of excitation in the heart. According to his biographer,

“Lewis had amazing powers of concentration and drove himself relentlessly: ‘the pace was terrific and it left his co-workers panting’ (Drury and Grant, 146). He resented weekends and public holidays as interfering with his work, and he disliked light conversation when in his department. The daytime was reserved for experimental work in the laboratory, and he then worked late into the night at home, writing and reading.” (Hollman 2004)

Obituaries showered Lewis with praise, including *UCH Magazine* (July 1945), *The Times* (19 March 1945) and *Obituary Notices of Fellows of the Royal Society* (Drury 1945). Hollman’s (1997) biography of Lewis is superb, especially for its description of Lewis’ technical work; also see Hollman (2004) and WL (2009).

Shortly after Lewis’s death, UCHMS colleagues launched an international appeal for commemoration (Anonymous 1946).
Figure 33 (above)
Normal human electrocardiograms, from Lewis (1920:48).

Figure 34
Photograph of subject ready for electrocardiogram observation, from Lewis (1920:46).
Some of his students from the US and Canada raised sufficient money to commission a special brass plaque from the noted British engraver Allan Gairdner Wyon (Figure 35), chiefly remembered for his original designs for the London School of Hygiene and Tropical Medicine.

Additional funds were raised to commission a portrait (Figure 32). This hung in the Library. An original oil by Evan Walters, this portrait copied Walter’s own 1939 first portrait of Lewis, held by Welsh National School of Medicine.

Lewis’s legacy as a promoter of research was shown in the swift organisation of “The Thomas Lewis Society” after his death. This was an informal group of former students and colleagues, gathered to “promote discussion of recent work in the field of medical sciences,” something they felt Lewis had encouraged particularly well. In 1955, the group organised a club tie. In homage to Lewis, pioneer of the electrocardiogram, they chose a design in which the letters “ECG” sat embroidered on a plain red background.

Figure 35
Plaque dedicated to Sir Thomas Lewis, located on the north wall of the Library. Commissioned in 1945; dedicated circa 1946. Engraver was Allan Gairdner Wyon FRBS RMS (1882-1962).
Figure 36
University College Opera rehearsal in Thomas Lewis Room. Source: UCOpera.

Drifting

After the library’s departure in 1999, the “Thomas Lewis Room” provided a common room for medical students. This facility was immensely popular. Nevertheless, the room was closed in 2004 as the result of space consolidations. This decision sparked considerable - and vocal - protests. Key to the protests was the point that neither medical school nor university had a specific plan for re-using the space. Closure seemed simply a waste.

The space was left vacant for roughly a year. Afterwards, it provided a site for temporary offices for several university departments. This was a time of considerable pressure on the estate within UCL, so no space was left to linger for long. Still, use of the Thomas Lewis Room was consistently *ad hoc* between 2004-2010.

For example, it was sometimes used by UCL clubs and organisations, such as for rehearsal space by the UCLU Music Society and University College Opera (UCO 2011). In 2010, the room served as a temporary reading room during refurbishment in UCL’s Main Library.

Sporadic use took its toll on the Thomas Lewis Building. At some point following the departure of the Medical School’s Library in 1999, some of the busts lining the balcony were stolen (Figures 30, 31, 36; for a
full list of the busts, see Appendix). Several were later recovered. Those still in place were removed by UCL and placed in secure storage. Fortunately, the full set had been catalogued and photographed in 1985 by Mr Philip Ward-Jackson (Courtauld Institute of Art).

In 2005, the “Thomas Lewis Room” featured in Christopher Nolan’s film, *Batman Begins* (2005). It served as a Gotham City courtroom. Nolan graduated from UCL (1993, English) and makes a point of using UCL property in his films when possible.

### Figure 37
University College Opera rehearsal in Thomas Lewis Room. Source: Peter Stanford.

### Grant Museum Moves In

The Grant Museum of Zoology and Comparative Anatomy has its origins in teaching collections assembled by the first Professor of Zoology and Comparative Anatomy at the university, Robert Edmond Grant (Parker 2006). These were housed originally in the Wilkins Building. The collections were used heavily during the nineteenth century’s vogue for comparative anatomy and the dissection of exotic zoological specimens. New materials were added unevenly by successive professors and curators. In the twentieth century, the collection grew in leaps and bounds owing to acquisitions from the disposal of natural history collections at other institutions (Ashby 2006).
Following a relocation from the attic of the UCL Medawar Building into the basement of the UCL Darwin Building, the museum was dedicated to Robert Grant’s memory in 1997. This followed an important revival of interest in Grant as a forgotten, radical, Scottish transmutationist, championed by Adrian Desmond’s (1989) *Politics of Evolution* and his later work with James Moore (1992) on *Darwin*.

*Figure 38*
Installation of specimen in the new location for the Grant Museum of Zoology, November 2010. Photo: UCL Grant Museum.

*Figure 39*
Installation of specimen in the new location for the Grant Museum of Zoology, November 2010. Photo: UCL Grant Museum.
This dedication also marked a significant change in the museum’s mission. For most of its history, the collections were organised for academic study and teaching of zoology at university level. However, owing to policy changes across UCL related to access, outreach, and engagement, the Grant Museum significantly expanded its educational programmes for schools and other audiences. One layer of this remit focused particular attention on local audiences, i.e., in Camden near UCL’s Bloomsbury campus. Staff numbers expanded. Resources were put into curation, interpretation, and outreach activities.

As a result of these many changes in the museum, visitor numbers and reputation quickly grew, with comments generally focusing on the number and variety of real specimens on display and the ‘old-fashioned’ feel of the exhibition style.

In 2010, events converged to force a move of the Grant Museum and its 67,000 specimens. First, activities were expanding beyond the capacity of the museum’s space in the Darwin Building. Second, its resources (esp. storage) were scattered and needed rationalisation. Third, with space for laboratory-based research increasingly at a premium across the UCL estate, some biologists were questioning the relative value of such a museum and collection.

Figure 40
Grant Museum of Zoology, ready for re-opening in the Thomas Lewis Room, March 2011.
in what they saw as premium real estate. Surely, they argued, activities more in line with rising interests in biomedical and molecular technologies had priority. This echoed the familiar “molecular vs. morphological” tensions at many institutions with natural history collections. Finally, the Darwin Building was due for major refurbishment. Risk to visitors and collections was deemed too high to keep the facility open. The site in the Darwin Building closed in June 2010.

Working quickly to minimise disruption, several venues were considered for relocation, with the Thomas Lewis Room selected as a “temporary” solution. The Grant Museum opened in this new home in March 2011.

Nearly 300 people visited on the first day of the re-opening. This was accompanied by a good deal of media attention and chatter on the blogosphere. Without doubt, the overall impression has been that the new venue is an unqualified success.

The future of the Grant Museum is a subject of much discussion. The current economic environment coincides with a period of radical changes in academic fields and the nature of specialisation within universities. Whatever its future, the Grant Museum of Zoology, in its new home, sets a high standard. It houses a priceless collection of...
No Ordinary Space

objects and is home to an inspiring team of professionals. The museum offers an ideal setting for visitors, volunteers, students, and scholars to come together for better understanding the natural world. It certainly is no ordinary space.

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Appendix: Twelve Apostles in the Library

On the balcony of the Library in the 1907 Waterhouse Building were busts honouring men associated with medicine and surgery at University College Hospital. These were accumulated before construction of this building, not all at once. None was specially commissioned for the Library. It’s not known who made the decision to select these twelve bust from among all those available in the Medical School.

This appendix provides images of the busts installed on the balcony, plus offers brief biographical notes.

Cline, Henry
(1750-1827) Surgeon. Trained by William Hunter. Lectured on his wedding day. Masterful surgeon. Advocate of Jenner’s method of vaccinating against smallpox. Surgeon and Lecturer on Anatomy, St Thomas’s Hospital, Examiner, Master, and President at the College of Surgeons; delivered the Hunterian oration, 1816, 1824. Radical democrat and deist, widely respected for his high moral character.
Sources: ODNB, King’s College Archives
Image: UCL Art image A85-733
Sculptor: F. Chantrey, date unknown

Bell, Charles
(1774-1842) Physician and surgeon. In 1827 Bell was appointed as a professor of anatomy, surgery, and physiology at London University. Gave inaugural address at opening of University Medical School. Surgeon to Middlesex Hospital 1814-1836.
Sources: ODNB
Image: UCL Art image A85-731
Sculptor: Henry Weekes, 1856

Carswell, Robert
(1793-1857) Physician and pathological anatomist. Chair of pathological anatomy and curator of Medical Museum, UCL. In 1831, Carswell was appointed physician to the original dispensary at UCL, prior to the building of later the North London Hospital (UCH1).
Sources: ODNB
Image: UCL Art image A85-727
Sculptor: Annable Dutrieux, 1856
Davis, David Daniel
(1777-1841) Professor of midwifery and diseases of women and children in UCL 1828 to 1841 and obstetric physician to UCH 1834 to 1841. Member of radical medical circles, opposed “corrupt” medical colleges.
Sources: ODNB
Image: UCL Art image A85-732
Sculptor: Edward Davis, 1835

Erichsen, John Eric
Sources: ODNB, Merrington
Image: UCL Art image A85-725
Sculptor: W.H. Thorneycroft, 1882

George, Richard Francis
(1798-1879) Bath physician. Surgeon to the Bath Hospital. Also Surgeon Royal Mineral Water Hospital. Member Royal Medical and Chirurgical Society of London (elected 1821). Member of Provincial Medical and Surgical Association, formed at Worcester in 1832, becomes BMA in 1856.
Sources: British Medical Journal 03Jan1880, p37.
Image: UCL Art image A85-729
Sculptor: unknown, date unknown
Liston, Robert
(1794-1847) Surgeon and Anatomist. Trained in Edinburgh under John Barclay. Popular lecturer and demonstrator. Exceptional skill as a surgeon. Appointed surgeon at UCH, 1834, then UCL Professor of Clinical Surgery, 1835. Council of Royal College of Surgeons, 1840; Board of Examiners 1846; Elected FRS 1841. First in England to perform operation under ether vapour UCH, 21 December 1846.
Sources: ODNB
Image: UCL Art image A85-726
Sculptor: Thomas Campbell, 1850

Lombe, Edward
Sources: ODNB, UCL Special Collections
Image: UCL Art image A85-723
Sculptor: unknown, date c.1828

Marshall, John
(1818-1891) Surgeon. Trained at UCH. Distinguished in anatomy, especially structures in the brain, and the relations between anatomy and physiology. Trained art students in anatomy. Talented administrator. Professor of Principles and Practice of Surgery 1866-1885, succeeding Erichsen. FRS and President RCS 1883-1884,
Sources: ODNB, Godfrey 1955
Image: UCL Art image A85-734
Sculptor: Thomas Brock, 1893
Mouat, Frederic John
(1816-1897) Surgeon. Trained at UCH, member RCS 1838. Distinguished in Indian Civil Medical Service, later Professor of Medicine in Bengal Medical College and advocate of prison reform and education. Later, Inspector for Local Government Board and active in Royal Statistical Society (president, 1890).
Sources: Lawrenson (2007), Merrington
Image: UCL Art image A85-724
Sculptor: W. H. Thorneycroft, 1874

Murphy, Edward William
(1802-1877) Obstetrician. Dublin born and qualified as surgeon at Dublin Lying-in Hospital. Appointed obstetric physician at UCH (1841). In 1848, one of first to use chloroform in midwifery. Launched clinic for gynaecology. Expanded midwifery training in general medical education at UCL.
Sources: Merrington
Image: UCL Art image A85-730
Sculptor: Edward A Foley, 1874

Parkes, Edmund Alexander
(1819-1876) Physician. Expert in army medicine and hygiene. Studied at UCL, qualified at UCH, distinguished in anatomy, physiology, and materia medica. UCH first physician (1849) and chair of clinical medicine UCL. Served in India and Crimea (1855, Army Medical Service). Ran military hospital at Renkioi, influenced by Nightingale. Became Chair of Hygiene at Army Medical School in Chatham.
Sources: ODNB, Merrington
Image: UCL Art image A85-728
Sculptor: Edward Davis, 1860
Figure 37
Original location of busts on balcony of Thomas Lewis Room.
In 2011, UCL’s Grant Museum of Zoology moved into the Thomas Lewis Room of UCL’s Rockefeller Building. This book provides historical notes about the room, the building, and the wider university and medical school environment. The aim is to answer a range of basic questions visitors might have about the space and its history. An appendix identifies the “twelve apostles” of the old Medical School Library, once honoured by sculptures displayed along the room’s balcony. This book contributes to the history of science and medicine at University College London (UCL) and University College Hospital (UCH).