CLINICAL SCHOOL SPACE STRATEGY

1. Background

The Clinical School is, according to the University’s published figures, the most densely populated School Estate. Net assignable space for the Clinical School is 32,191m², for a headcount of 2,197 staff (2014 figures as published in the August 2015 databook), therefore a density of 14.65m²/head. Comparable figures for other Schools have a mean of 37.32m²/head with a range of 30.96 m²/head to 45.64m²/head. Thus the School is demonstrably very efficient in its use of space. However, this scarce resource threatens to constrain the scientific output of the School through (a) inability to house grant-funded staff and (b) a disincentive to recruitment and retention of key staff as the extent of facilities we can offer compares unfavourably with other research organisations.

Square meterage is not the only key metric for space resource. The degree of fitness for purpose, which can be measured by the RICS categories A-DX, is a crucial criterion and we still are seeking figures for this from Estates Management so we can properly understand the condition of the School’s estate. In addition, the geographical arrangement and configuration should promote academic cohesion in cognate scientific areas and enable interdisciplinary exchange. Several departments and disciplines are dispersed across the campus. While there is a strategic rationale for maintaining the location of some activity where it is, for example to take advantage of space proximal to a clinical area that is related to the research activity, in many instances it appears that the current space allocation has developed ad hoc, opportunistically or in extremis. Poor quality space has a direct effect on recruitment and retention, especially at senior levels. Wellbeing of the workforce can also be affected in overcrowded accommodation. Dispersed space makes administration of the Department and intra-Departmental communication less efficient, provision of shared scientific services less effective, and (generally) scientific collaboration more difficult.

Substantial areas of the School’s space are embedded within Addenbrooke’s Hospital buildings, or other NHS Trust estate. Douglas House and the Strangeways Laboratory are both remote from the Campus [Redacted]. The old Strangeways building, and Douglas House, have serious infrastructural issues. The Clinical School office and teaching building is now 40 years old and due for a maintenance overhaul alongside a refurbishment to provide sufficient fit-for-purpose teaching space to accommodate the enlarged clinical student cohort arriving in September 2017.

The School also considers that it has a responsibility to drive a responsible approach to energy utilisation; this is almost impossible in many parts of the existing buildings.

Since its formation in 1976 Cambridge’s Clinical School has grown very fast and achieved a pre-eminent position internationally. The success of its partnerships with the NHS and the MRC has been a major contributor to the development of the Cambridge Biomedical Campus, which has attracted one of the world’s major pharmaceutical companies to relocate to Cambridge. This rapid development has been enabled by the opportunity provided by a greenfield site on the fringe of the city. Nevertheless, a brief tour of the University and hospital facilities on the site would allow anyone to appreciate that these have developed in a piecemeal fashion.
In the School’s view there is a pressing requirement to develop a coherent approach to the University’s presence on the site, and a once in a generation opportunity for the University, with the NHS and other partners, to develop a new masterplan for development to the South of the city. This would include whether the University would consider the Veterinary School and components of the biomedical research currently based on the Downing site might productively relocate to the Cambridge Biomedical Campus and how this would be achieved. The School welcomes the appointment of Michael Aston in the University Estates Management section, whose brief is to take this forward and the School looks forward to working with him on this large project.

2. The University context

As mentioned above, an holistic and long-term strategic view by the University of the opportunities on the Cambridge Biomedical Campus needs to be taken. This may include a policy on land acquisition, partnership, infrastructure (e.g. energy and IT communications), staff facilities and promoting sustainable development. As an adjunct to this strategic view consideration should be given to the impact of further MRC Unit transfers-in, especially where those Units are off-Campus.

Further consideration also needs to be given on how to ensure smooth working of the School Office and Departments with the UAS, whose centre of geographical gravity is moving towards West Cambridge. Attending a meeting which for other Schools or sections of the UAS is held conveniently near to their normal workplaces, will in contrast take an hour out of the working day in travel time for attendees from the Clinical School. The School is prioritising provision of video-conferencing facilities and strongly encouraging that facilities should be provided as a matter of routine in Greenwich House and the Old Schools.

The School also considers that serious consideration should be given as to how it can promote interdisciplinary research. Should 5 or 10% of capacity on the University’s space on the biomedical campus be reserved for this to ensure that active collaborations with the physical sciences, mathematics, computer sciences, engineering, and arts and humanities flourish? How can the University ensure that there is excellent connectivity between West Cambridge and the Biomedical Campus?

The School is only as good as the staff and students who work within it and thus we need to be mindful of accommodation, childcare and travel issues for individuals, especially early-career and support staff (e.g. IT and animal husbandry). We consider the University’s approach in North West Cambridge to be visionary, but it will probably not impact on these issues for those working on the biomedical campus. Furthermore, there will clearly be vigorous recruiting by Astra Zeneca and other proximal organizations and we are in danger of losing many key staff; we believe this would be substantially mitigated by addressing some of these issues and welcome the University’s proposal to build a new University Nursery close to the Biomedical Campus.

3. The School’s Academic Strategy as relevant to Estate Development

The School has grown rapidly in the last decade. This trajectory is expected to continue. Biomedical research is widely agreed to be a particular strength of the UK, and government reports have
consistently identified the sector as a priority for investment. Societal challenges posed by an ageing population, together with the desire to prevent and treat disease are expected to drive continuing growth of the sector as a whole. Importantly academic activity is supported not only by Research Council investment, but also by a robust charitable sector including some of the world’s most successful organisations of their kind (Wellcome Trust, Cancer Research UK), and by the NHS, which has identified investment in research as crucial for achieving sustainability. Within the biomedical sector, it is clear that research will increasingly be concentrated in those organisations that have the critical mass and excellence to be world-leading; and Cambridge biomedicine is ranked in the highest positions nationally and internationally. Reinforcing this, the School has a higher than average success rate compared with the HEI sector in general. Thus we are in a sector that is benefiting from sustained investment and are well placed to outperform the sector as a whole.

The School’s demographic for Academic and senior Research posts (at Grade 9 and above including the clinical consultant grade) is reasonably balanced, albeit with a slight bulge in the 40-44 age band and relatively few over 60s, and we thus anticipate a regular and reasonably smooth turnover of principal investigators. For our continued success it is imperative that we are well placed to attract and retain the best scientists. The standard of our laboratory space is very important in this; we operate in a fiercely competitive national and international environment (Oxford’s School of Clinical Medicine has a portfolio of research double the size of Cambridge’s). For those we seek to attract and retain the scientific environment and facilities are often decisive, and are more important than personal remuneration etc. Much of our current estate is very unattractive compared to those created by major investment at peer institutions (notably Oxford’s Old Road Campus, Imperial West, and the Francis Crick Institute).

The School is nonetheless operating in an exciting external environment. The MRC will transfer its remaining three intramural Units located in Cambridge into the School as University Units, and other funders (CRUK, Wellcome, BHF) are in discussion with us about major investments in our strategic priority areas. Thus there is a current opportunity – contingent on our estates strategy - to create new Institutes, Units and major collaborative centres.

The School has a clear academic strategy as articulated in our submissions to HEFCE’s REF2014, and our recent successful bid (in partnership with SBS) for £1.5m per annum of Institutional Strategic Support Funding from the Wellcome Trust. This is based on five major disease themes – Neurosciences, Cancer, Metabolism, Immunity & Infection, and Cardiorespiratory. The connectedness of this to the University’s overall strategy and our excellence in these areas is underlined by the fact that each of these is a University Strategic Network / Initiative. Cutting across these themes are several major scientific disciplines – those that are important from an estates perspective are Cell & Molecular Biology, Stem Cells & Regenerative Medicine, Biofacilities for model organisms, Experimental Medicine, and Public Health. Our vision is that each of these ten areas should have dedicated, state-of-the-art research facilities centred on a purpose-designed Institute or facility. This has already been achieved for Cancer (CRUK-CI) although this now needs to be complemented by a similarly excellent clinical build in the hospital, Metabolic Sciences (IMS) and Cell & Molecular Biology (CIMR) and we have agreed plans for Cardiorespiratory (HLRI, Project Atria), Biofacilities (Project Bellatrix), Experimental Medicine (Project Gemma), Stem Cells & Regenerative Medicine and Infection & Immunity (Project Capella). The next phase will be to develop an Institute
for Translational Neuroscience / Brain Village and an Institute of Public Health. The Department of Paediatrics is keen to develop a vision in partnership with the CUHNHSFT for new state-of-the-art clinical facilities for children including embedded research space. Radiology and Clinical Neurosciences is developing an ambitious science strategy supported by a more integrated way of working with the NHS, catalysed by a major award from the MRC Clinical Research Infrastructures competition. Imaginative estates solutions are needed to make the most of the new equipment, with electrical power being a particular issue. Part of Haematology will be moving to Capella, strengthening links with Stem Cell medicine and benefitting from proximity to the critical mass of Principal Investigators in Cancer. However, smaller Departments (e.g. Surgery, Obstetrics & Gynaecology, Paediatrics), or sections of Departments, embedded in NHS or NHSBT space will need support as the Trust buildings are refurbished around them to ensure that they are actively included and able to take any available opportunities to grow sustainably and/or work more effectively in their clinical context.

Specific aspects of our academic strategy that have estates implications and which we consider we have not yet addressed include biobanking in a robust cost-effective way, potential increases in the number of Wellcome Centres, dramatically increasing our ability to commercialise our research and collaborate with industry, and exploiting Cambridge’s potential for bringing other disciplines to bear on biomedical challenges.

4. Key Estate Development strategic principles

- Achieving more contiguous space for Departments to reduce fragmentation and encouraging moves that fit the long term capital development blueprint (for example Psychiatry and Neurosciences to the Forvie site).
- Ensuring balanced capital development with academic priorities and not neglecting research infrastructure needs.
- Using the new WCDC links and increased secure bandwidth connectivity around the Campus reducing the need for server room space.
- Ensuring renewal of embedded space as the Trust refurnishes, reassigns or rebuilds space to maintain both overall footprint and appropriate proximity to clinical areas.
- Recognizing the good financial value of embedded space, albeit balanced by a decline in fitness for purpose as maintaining clinical space is a priority for the Trust over research space.
- Understanding University PPM schedules for existing buildings so that a more coherent plan exists for keeping buildings fit for purpose without creating a backlog maintenance cliff-edge.
- Developing a better process with Estates for achieving fit for purpose, affordable and timely quotes for minor works.
- Negotiating an extension of the island site lease to secure this footprint for future building on this well-positioned plot.
- Expecting that new build should release older space for reallocation or refurbishment to meet the aims of the School.
- Ensuring that retention of the full clinical student cohort is an opportunity seized to create leading edge teaching facilities, for example an e-learning suite.
- Facilitating equipment sharing and encouraging shared facilities across the School (and University) especially Health Imaging equipment, GMP suite, FACS etc..
Facilitating collaboration with Campus partners both scientifically and in social/meeting room space.

Working effectively with all NHS Trust partners and transferred-in Units over space arrangements and avoiding duplicating facilities or severely disparate space utilization across the School.

Utilizing the Clifford Allbutt and old CPE building to catalyse recruitment ahead of major capital build occupation.

Supporting financially sustainable growth of the School in a possible new accounting environment where space is more transparently identified as a Departmental resource in the RAM.

Introducing carbon-efficient technologies where possible to reduce recurrent spend on energy.

Recognizing that limits to electrical power in some areas of the campus (principally those areas served by the Hills Road substation) is a limiting factor on growth (utilizing the Island site fully) and capital equipment investment (it will not be possible to install another scanner).

Enabling clustering of administration in order to provide a better service to departments.

Exploring a shared administration building with CUHP partners in order to reserve expensive laboratory building space for research growth.

Developing a School Masterplan for space utilisation, incorporating these principles and setting out a roadmap for future space deployment and development.

5. Capital Development priorities for the Clinical School

- Gemma (ACRC)
- Capella (formerly 16,000m² building)
- Bellatrix (formerly TMTH)
- Atria (formerly HLRI)
- Institute of Public Health
- Exit Strangeways – perhaps to allow the site to be developed for accommodation or a Nursery
- Brain Village
- Cancer Centre and new clinical facilities for children in the context of the Trust’s development plans
- Capella 2 (i.e. the plot immediately north of Capella)
- Major refurbishment as in the Strategic Plan: e.g. Level 5 Medicine; Clinical School Offices; decant space for the clinical school offices and teaching; former Clinical School Workshops for scanner and office space; CIMR if the Wellcome Trust centre bid is successful; Paediatrics to support an incoming Head of Department; Surgery embedded space
- Shared, possibly offsite, long term sample storage (including biobanking), currently subject to a review of need and options
- Transfer-in of MRC Biostatistics and Mitochondrial Biology on the Campus, plus MRC CBSU and thus acquisition by the University of the Chaucer Road site
- Opportunities for the Vet School to relocate onto or close to the Biomedical Campus with potential for shared expanded teaching facilities and complementary research

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