

## Programme Specification 2024-25

### CLINICAL MEDICINE: MB/PhD PROGRAMME

<b>Awarding Body</b>	University of Cambridge
<b>Teaching Institution</b>	Faculty of Clinical Medicine
<b>Accreditation Details</b>	General Medical Council (GMC)
<b>Name of Final Award</b>	MB/BChir and PhD
<b>Programme Title</b>	Clinical Medicine: MB/PhD Programme
<b>UCAS Code</b>	n/a
<b>HECoS Code(s)</b>	100267 (clinical medicine) 100276 (pre-clinical medicine)
<b>QAA Benchmark Statement(s)</b>	Medicine
<b>Qualifications Framework Level</b>	8 (Doctoral degrees) and Clinical Training
<b>Date specification produced</b>	August 2021

The University of Cambridge School of Clinical Medicine (Clinical School) was formally established in January 1975 when it subsumed the School of Clinical Research and Postgraduate Teaching that had existed since 1946. The first entry of 50 Clinical Students was admitted in October 1976, with numbers rising to 160 by 2016. Since September 2017, all preclinical students stay in Cambridge for the clinical component of the course, subject to satisfactory progression and this has increased the annual intake to around 260 students. Approximately 10 of those students are offered places on the MB/PhD programme; in addition, 40 students are admitted to the Cambridge Graduate-entry Course (CGC).

The focus of the Clinical School's activities is the Cambridge University Hospitals NHS Foundation Trust (Addenbrooke's Hospital) situated on the Cambridge Biomedical Campus, an outstanding centre for clinical practice, medical education and biomedical research. In addition, there are significant links in teaching and research with Regional Partner NHS Trust hospitals and in general practices throughout the East of England. The MB/PhD Programme leads to the MB, BChir and PhD degrees and is designed for medical students who are interested in academic or research careers by enabling them to integrate a three-year period of research with their clinical education.

The clinical component of the curriculum is designed to equip students for a lifetime of medical practice in a changing world with emphasis on the acquisition of clinical skills by direct patient contact. At the start of the programme, students follow the Standard Course Year 4 curriculum up to and including the Year 4 Student Selected Component (SSC). In general this SSC will be conducted in the prospective PhD host laboratory. After Part 1 of the Final MB examinations, and subject to satisfactory progress, a three-year period of full-time research follows, combined with regular clinical education, including weekly clinical supervisions and monthly clinical seminars. It concludes with students rejoining the clinical course to complete their studies.

During the research component, students are based mainly in the laboratory or department of their choice at the Addenbrooke's complex or at one of the University sites in central Cambridge, or at a University-affiliated research institute.

#### **Aims of the Programme**

The University of Cambridge School of Clinical Medicine will, through inspirational teaching and training, educate individuals who;

- will become exceptional doctors or biomedical scientists;
- combine a depth of scientific understanding with outstanding clinical and communication skills;
- demonstrate a caring, compassionate and professional approach to patients and the public;

and

- are equipped to become future international leaders of their profession;

through its commitment to the pursuit of excellence, support scientists of international standing in basic and clinical research, aiming to;

- understand fundamental biology and thereby the mechanisms underlying disease;
- integrate basic and clinical research;
- apply a rigorous mechanism-based approach to clinical problems; and
- innovate to solve the health challenges of our society.

### **Programme Structure**

The duration of the MB/PhD Programme is six academic years, starting in September of year one and finishing in June of year six (5 years and 9 months).

#### ***Clinical Component – 3 years***

The clinical course is based in Cambridge but students will also study at a number of Regional Partner NHS Trust hospitals and in general practices throughout the East of England, to take advantage of the different educational opportunities which they are able to offer. At the beginning of each year of the course, each student receives a detailed personal schedule which shows the length and locations of their placements.

Students attend Year 4 of the Standard Clinical Course for one year, culminating in a laboratory-based Student Selected Component and the Final MB Part 1 examinations. They then take up their full time research studentships. After three years of research, students resume clinical studies for a final two years.

#### ***Research Component - 3 years***

The research component is based in Cambridge; students retain their medical student status and remain on the Medical Student Register throughout the research period. Students are required to continue to devote time to their clinical work while undertaking research including:

- weekly one hour clinical supervisions (including bedside clinical teaching) as for the Standard clinical course.
- monthly clinical-topic seminars. The curriculum for the monthly seminars is mapped to the Standard clinical curriculum with a rolling three year programme reinforcing student's prior learning in Year 4, delivering core clinical educational content (e.g. basic life support), and giving students insight into some of the common clinical problems they may encounter in Year 5.
- The programme generally includes in each one-year cycle:
  - a review of several clinical problem areas encountered Year 4
  - at least one clinical problem area they will encounter in Year 5
  - a review of practical procedures learning from Year 4
  - a Basic Life support review course
  - a review of a Year 4 Clinical Communication Skills component
  - a review of a Year 4 patient investigation component
  - a review of a Year 4 radiology component

Course content is monitored by the Clinical School's Curriculum Committee to ensure compliance with the requirements of the GMC Outcomes for Graduates and the QAA Benchmark Statement for Medicine.

#### ***Researcher Development – throughout the Research Component***

Students are expected to take full advantage of the University's Researcher Development programme which, following an initial skills analysis, provides an extensive menu of courses themed into four main areas which cover fifteen key competencies. There is a 'core skills' programme for first year students, which provides key research skills needed from the very start of

the course, and which lays the foundation for the training opportunities provided in further years. Further researcher development is carried out through the Graduate School of Life Sciences (of which the Clinical School is a part).

## **Learning Outcomes**

### ***Knowledge and understanding***

Students should acquire the knowledge, skills and behaviours appropriate to the core curriculum of each clinical year and the additional aims of the MB/PhD Programme as follows:

By the end of **Year 1**, students should have;

- completed Year 4 of the Clinical Course;
- passed the Final MB Part 1 examination;
- investigated research project options;
- applied to and been accepted by a department and Research Supervisor;
- completed University and funding body research application forms;
- attended the annual MB/PhD Symposium.

By the end of **Year 2**, Students should have;

- continued to develop clinical skills through attending weekly supervisions and monthly seminars;
- completed the Graduate School Induction Programme covering safety, library resources, ethics, literature searches, IP, data management, presentation skills etc.;
- attended Graduate School Researcher Development courses as directed by the Director of Graduate Education;
- completed a year's research and submitted a satisfactory Year One report to the Degree Committee;
- maintained a Personal Progress Log;
- attended the annual MB/PhD Symposium.

By the end of **Year 3**, Students should have;

- continued to develop clinical skills through attending weekly supervisions and monthly seminars;
- attended Graduate School Researcher Development courses as directed by the Director of Graduate Education;
- attended an external symposium/conference;
- completed two years' 'bench', information gathering research according to plan;
- prepared a thesis plan;
- maintained a Personal Progress Log;
- attended the annual MB/PhD Symposium.

By the end of **Year 4**, Students should have;

- continued to develop clinical skills through attending weekly supervisions and monthly seminars;
- attended Graduate School Researcher Development courses as directed by the Director of Graduate Education;
- prepared and presented a talk on their research to an appropriate group, e.g. a departmental meeting, MB/PhD Symposium, external symposia/conferences;
- completed the information gathering research phase and written and submitted the thesis;
- maintained a Personal Progress Log;
- attended the annual MB/PhD Symposium.

By the end of the **Year 5**, students should have;

- attended the annual MB/PhD Symposium.
- completed Year 5 of the clinical course and Final MB Part 2.

By the end of **Year 6**, students should have;

- attended the annual MB/PhD Symposium;
- completed the final year of the clinical course and Final MB Part 3.

### **Skills**

*Clinical Course Components:*

As for Standard clinical course (*please see separate programme specification*).

### **Teaching and learning methods**

***Clinical Course Components:***

As for Standard clinical course.

***Research Component:***

As for Graduate School PhD programmes.

### **Assessment Methods**

***Clinical Course Components:***

As for Standard clinical course. Students must have passed the Final MB Part I Examination in the upper 50% relative to all medical students undertaking the exam in the same year.

***Research Component:***

At the end of year one of the PhD, a report on progress is submitted for examination by two assessors (neither of whom is the research supervisor) and a viva is held. At the same time, the supervisor writes a report on progress. These two reports, taken together, are submitted to the Degree Committee for approval. If the reports are favourable and the assessors and supervisor recommend progression, the student continues with PhD research. If not, a second attempt may be allowed, or a candidate may be advised to register for a master's degree instead.

All PhD students record their Researcher Development training by completing a Personal Progress Log; this log is reviewed at the end of each year by the student's Research Supervisor, and it may be requested for inspection by the Degree Committee when considering the 'first year report' or the final dissertation. The PhD thesis should be submitted before the return to clinical studies, ideally allowing five weeks for the organisation of the viva.

The requirements for the thesis and its examination for the PhD degree are exactly the same as for any PhD in the Faculty of Clinical Medicine.

### **Programme requirements**

***Clinical Component***

Progression requirements are as for the Standard clinical course.

Attendance at more than 50% of the Clinical Seminar Programme is required during the research phase – failure to adequately attend will require review with a member of the Deanery team and possible referral for review by the Medical and Veterinary Student Progress Panel.

In addition, during the research period, the Clinical Supervisors produce a termly report on the clinical progress of each student assessing;

- Background Knowledge;
- Communication with Patients;
- History taking/Presentation;
- Examination Technique;
- Problem Solving skills.

Failure to adequately attend Clinical Supervisions may result in referral for review by the progress

panel.

### **Research Component**

A condition for entering the Research Component is a high score in the Final MB Part I Examination.

At the end of the first year of research, students must submit a satisfactory Year One report to the Degree Committee.

The PhD thesis should be submitted before the return to clinical studies.

### **Student Support**

The college tutorial system, Directors of Studies and University Counselling Service offer personal support and advice to students. In the Clinical School, the Clinical Dean and Sub-Deans, and all members of the Education Division team are always pleased to talk to students and to offer help and advice. To support students who experience serious mental health difficulties, the Clinical School has set up and funds a rapid referral mental health service, through which students have fast access to a psychiatrist and to a psychologist, if required.

### **Managing Teaching Quality and Standards**

Opinions from students about teaching and educational facilities are actively sought throughout all courses and changes are made in response to the suggestions received.

### **Placement Evaluation**

At the end of most placements and course modules, students are invited to comment by completing an online questionnaire. Course organisers value feedback from students on the strengths and weaknesses of placements and hospitals. Many changes to the courses and selection of hospitals for placements have been made as a consequence of student reports.

### **Committee Structure**

Courses are managed by formal and informal committees all of which have student representative members. Key committees are the Faculty Board of Clinical Medicine, Medical Education Committee, Clinical Education Quality Committee, Curriculum Committee, MB/PhD Programme Committee and Student/Staff Liaison Committee.

### **Ad hoc Feedback**

Students may raise any concerns, at any time during the course, with the Clinical Dean, Clinical Sub-deans (including Regional Sub-Deans), MB/PhD Programme Director, their Clinical Supervisors, College Director of Studies or the administrators either in the Education Division in the Clinical School, or in regional hospitals.

### **Hospital and General Practice Visits**

All placements are monitored by the Clinical Dean who visits every teaching hospital on a regular basis. These include annual Quality Assurance visits at which students attached to the hospital at the time are invited to give feedback on all aspects of the provision of teaching and facilities. All teaching General Practices are visited on commencement of teaching and marked against a set of quality criteria; teaching quality is then regularly monitored.

### **Student Voice**

During each R & I week, representatives of the deanery and administrative team are available at the end of one session to answer questions from students; notes are taken and circulated to student representatives and the Chair of the Student/Staff Liaison Group.

### **Staff Development and Appraisal/Performance Review**

All staff contributing to the education of students are encouraged to attend relevant training courses; annual reviews of their professional performance include their role as educators. All junior doctors involved with the Undergraduate Clinical Supervisor programme are selected, inducted and appraised, as well as being invited to attend the School's HEA accredited staff development programme (the integrated foundation in medical education programme).

### **Graduate Employability**

All students who successfully complete the course secure pre-registration Foundation posts; over 80% secure their first choice of post.

The University's Careers Service maintains links with relevant employers and takes into account employer needs and opinions in the services which it provides for students. The Careers Service also allocates a Careers Adviser to each College, Faculty and Department to act as a point of contact.

### **Management of Education Quality and Standards**

The University ensures high quality of teaching and learning in the following ways:

1. Scrutiny of the External Examiners Reports for all teaching programmes
2. Encouraging student engagement at both the local level, through involvement in Faculty and Departmental Committees, and at a central level by participation in nationally-benchmarked surveys
3. Participation in the biennial Education Monitoring and Review Process to explore provision, share good practice and suggest constructive courses of action
4. Mentoring, appraisal, and peer review of staff, and encouraging staff participation in personal development programmes

Every effort has been made to ensure the accuracy of the information in this programme specification. At the time of publication, the programme specification has been approved by the relevant Faculty Board (or equivalent). Programme specifications are reviewed annually, however, during the course of the academical year, any approved changes to the programme will be communicated to enrolled students through email notification or publication in the *Reporter*. The relevant faculty or department will endeavour to update the programme specification accordingly, and prior to the start of the next academical year.

Further information about specifications and an archive of programme specifications for all awards of the University is available online at: <https://www.camdata.admin.cam.ac.uk/>