Cambridge University Hospitals NHS Foundation Trust
Addenbrooke’s Hospital
(Public Health England, Clinical Microbiology and Public Health Laboratory)

EDUCATIONAL JOB DESCRIPTION AND PERSON SPECIFICATION

ACADEMIC CLINICAL FELLOW IN MEDICAL MICROBIOLOGY

Specialty
Medical Microbiology, with an interest in Infectious Diseases

Summary
This post is a five-year post leading to a CCT in Medical Microbiology at Addenbrooke’s Hospital in Cambridge.

The successful applicant will be a medical graduate who wishes to pursue a career that combines excellence in academic and clinical microbiology. Applications are particularly welcome from candidates with an interest in infectious diseases. This post comes with a single specialty NTN(a). However, there may be an opportunity to dual train in the future, subject to approval by the Postgraduate Dean and the East of England Local Education and Training Board.

The first three years will be spent as an Academic Clinical Fellow, with 25% of their time allocated to research. The appointee will be expected to develop and submit their own PhD research proposal during this period.

The post-holder will follow the Combined Infection Training (CIT) curriculum, which was approved in May 2014, and was implemented in August 2015. Thus candidates at the end of ST2 who have done Core Medical Training (CMT) and who have passed the MRCP examination are desirable for this post.

The post carries a National Training Number (NTN/A), allocated to the East of England Local Education Training Board.

[NOTE: This document describes the academic and clinical roles of the post and the training programmes associated with each of them. It also provides more general information on the Clinical Microbiology and Public Health Laboratory and the Department of Infectious Diseases at Addenbrooke’s Hospital. A series of annexes provide more detail on (A) the Conditions of Employment relevant to the Specialty Registrar status (B) Key organisations and personnel, (C) Guidelines for Training and learning plan), (D) Person specification (E) supplementary information on the medical microbiology training programme.]
Academic Training (25% FTE)

The environment
Cambridge has a strong track record in microbiology and infectious diseases research with a number of groups working on basic science and clinical studies. Academic microbiology was established in Cambridge in 2009 with the appointment of Professor Peacock to the Chair of Clinical Microbiology. Dr Torok joined as a Senior Research Associate / Honorary Consultant in 2011, and was awarded a Clinician Scientist Fellowship in 2013. Professor Gordon Dougan joined as Chair of Microbial Pathogenesis in 2015, and holds a joint appointment at the Wellcome Trust Sanger Institute. This group focuses on translating microbial genomics into clinical practice, and investigating host-pathogen interactions. Dr Torok is also involved in national and international clinical trials in Staphylococcus aureus bacteraemia.

In the Department of Medicine (http://www.med.cam.ac.uk/) Professor Lever’s group work on the molecular and structural biology of viruses such as HIV and rotavirus. Professor John Sinclair’s group studies how human cytomegalovirus (HCMV) persists in healthy individuals studying cellular factors which control virus latency and reactivation. Dr Wills’ group studies the control of HCMV infection by the immune system. Dr Yorgo Modis’s group aims gain a mechanistic understanding at the molecular level of how important pathogens interact with their host cells during infection. Professor Lalita Ramakrishnan’s group works on the pathogenesis of Mycobacterium tuberculosis and has developed a zebrafish model to study immunity to these mycobacteria. Dr Sergey Nejentsev’s group investigates the genetic and functional mechanisms of susceptibility to infection with M. tuberculosis. Dr Nicholas Matheson’s group studies viral and cellular regulation of immune metabolism.

In the Cambridge Institute of Medical Research (http://www.cimr.cam.ac.uk/), Professor Lehner’s group uses functional genetic and proteomic technologies to study how viruses evade the human immune system. Dr Michael Weekes’s group uses quantitative multiplexed proteomic approaches to characterise host restriction of intracellular pathogens.

There are additional research opportunities available at the Wellcome Trust Sanger Institute (http://www.sanger.ac.uk/), and through the Cambridge Infectious Diseases Initiative (http://www.infectiousdisease.cam.ac.uk/), the Cambridge Africa Programme (http://www.cambridge-africa.cam.ac.uk/), and the WHO Collaborating Centre for the modelling, evolution and control of emerging infectious diseases (http://www.whocc.infectiousdisease.cam.ac.uk/).

Research
The ACF would have 25% of their time allocated to research. It is anticipated that this would be taken as a three-month block every year, although the department would be flexible about this. To facilitate this, and depending on previous experience of the appointee, there is an opportunity to rotate through research disciplines and groups.

The appointee will be encouraged to find a research niche in microbiology. Current diagnostic and translational microbiology research themes within the department are focused on the utility of high-throughput genome sequencing technologies in diagnostic and public health microbiology. There are however, many other opportunities available, as detailed above. The successful candidate will be allocated laboratory space within the PHE CMPHL and other research laboratories as required.

During the course of the Academic Clinical Fellowship, the trainee would be expected to develop their own PhD research proposal, and to apply for funding. They will be strongly encouraged to apply for prizes, grants, scholarships and fellowships as well as to attend national and international meetings.

The appointee will also be expected contribute to the teaching of microbiology to undergraduate and postgraduate students and other allied healthcare professionals.

Academic Supervisor
Academic supervision will be provided by Professor Gordon Dougan, Dr Estee Torok, and/or the Principal Investigator of the relevant research group.

Clinical Training (75% FTE)

The successful candidate will follow the new medical microbiology curriculum incorporating combined infection training, which was implemented in August 2015 https://www.rcpath.org/resourceLibrary/medical-microbiology-incorporating-cit-curriculum.html

If the candidate wishes to pursue dual training in Medical Microbiology and Infectious Diseases, they will also be expected to follow the infectious diseases curriculum http://www.jrcptb.org.uk/sites/default/files/2015%20Infectious%20Diseases%20Curriculum%20with%20HIT.pdf
These curricula were approved by the General Medical Council in May 2014, as well as the curricula for Medical Virology and Tropical Medicine. All four curricula require completion of:

- Core Medical Training (CMT) or Acute Care Common Stem (ACCS) and attainment of the Membership of the Royal College of Physicians (MRCP) examination as an entry requirement.
- A two-year Combined Infection Training (CIT) training period to be tested by a summative examination that combines the content of the current medical microbiology and virology FRCPath Part 1, and the infectious diseases Specialty Certificate Examination (SCE).
- A period of Higher Specialist Training (HST) in one of the four specialties (Medical Microbiology, Medical Virology, Infectious Diseases, Tropical Medicine)

The training and service commitments will be in the PHE Clinical Microbiology and Public Health Laboratory and the Department of Infectious Diseases in Addenbrooke’s Hospital with accommodation located within each department. Further details of the programme and clinical training environment are given below.

Modules supervised by a Consultant Medical Microbiologist and Virologist will include laboratory work, infection diagnosis, prevention and control and principles of public health in relation to communicable diseases. During this period the candidate will gain proficiency in microbiology and laboratory practice, the basic biology of bacteria, viruses, fungi and parasites and host-pathogen relationships and health and safety. The trainee will be introduced to and gain proficiency in the diagnosis of clinical syndromes where infection is an important differential diagnosis and acquire a basic understanding of antimicrobial agents and their use in the clinical setting by attending ward rounds, clinical consultations and by clinical liaison with medical practitioners and other clinical staff. It is anticipated that during this time at least two months will be spent under supervision of a virology consultant.

Day-to-day clinical practice includes authorization of laboratory reports, dealing with telephone enquiries from clinicians and participating in ward rounds and clinical consults. The appointee will liaise closely with clinical colleagues concerning the diagnosis and management of patients, and infection control in specialist and non-specialist units at Addenbrooke’s and other hospitals, and with GPs. A Consultant Medical Microbiologist/Virologist will closely supervise all these duties. Where appropriate, bench work training in all sections of the laboratory will be provided.

Modules supervised by a Consultant in Infectious Diseases will include inpatient and outpatient care including care of patients with immunocompromise and HIV infection, travel-related infections, and patients receiving outpatient parenteral antibiotic therapy (OPAT). During this period the candidate will gain proficiency in the direct clinical care of inpatients and outpatients and the training received during this time will complement that received during training under the care of the medical microbiologist and virologist in the areas of basic biology of bacteria, viruses, fungi and parasites and host-pathogen relationships, health and safety, infection control and public health, diagnosis of clinical syndromes where infection is an important differential diagnosis, and antimicrobial agents and their use in the clinical setting.

On the Infectious Diseases ward, the appointee with organize with other doctors, investigations and treatment for 11 inpatients under the duty Infectious Diseases consultant, including weekend ward rounds. The appointee carries out clinical consultation assessments of inpatient referrals to Infectious Diseases (300 per year), and discusses the management with the duty consultant. The appointee contributes to the delivery of the OPAT service by assessing new referrals (some of whom are referred directly from the community to a rapid-access Cellulitis clinic), runs the twice-weekly clinical review of OPAT patients and contributes to the weekly MDT meeting and Orthopaedic infection meeting. The appointee has a regular Infectious Diseases clinic seeing new and follow-up patients including tuberculosis, and an HIV clinic in which they provide care for a cohort of 20-25 patients over time; the appointee also participates in chronic Hepatitis B & Hepatitis C clinics, and the Hepatitis/HIV co-infection clinic.

The post-holder will participate in clinical microbiology out-of-hours on-call rota, which includes attendance at the laboratory over weekends or bank holidays (frequency and banding to be determined) and a 1 in 8 rota on call from home for infectious diseases patients including weekend ward rounds, telephone advice to other hospitals, and referrals including the clinical protocol following occupational exposure to blood.

An indicative weekly timetable of duties and training is shown for all departments. This timetable may vary to meet individual training needs.

Summary Timetable for Microbiology
<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Monday</td>
<td>10.00 – 11.00</td>
<td>Microbiology Clinical meeting</td>
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<td>11.00 – 12.00</td>
<td>Bench round</td>
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<td>13.00 – 14.00</td>
<td>Infectious diseases teaching</td>
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<td>14.00 – 15.00</td>
<td>Adult intensive Care Unit ward round</td>
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<td>Tuesday</td>
<td>11.00 – 12.00</td>
<td>Bench round</td>
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<tr>
<td></td>
<td>13.00-14.00</td>
<td>Microbiology/Virology teaching</td>
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<td></td>
<td>15.00-16.00</td>
<td>Neurocritical Care Unit</td>
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<td>14.00 – 15.00</td>
<td>Adult Intensive Care Unit ward round</td>
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<tr>
<td>Wednesday</td>
<td>10.00-11.00</td>
<td>Joint Infectious Diseases</td>
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<td></td>
<td>11.00 – 12.00</td>
<td>Microbiology MDT</td>
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<td></td>
<td>14.00 – 15.00</td>
<td>Adult intensive Care Unit ward round</td>
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<tr>
<td>Thursday</td>
<td>11.00 – 12.00</td>
<td>Bench round</td>
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<td>13.00 – 13.15</td>
<td>Case of the week</td>
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<td></td>
<td>13.15 – 14.00</td>
<td>Departmental seminar</td>
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<td></td>
<td>14.00-15.30</td>
<td>Adult Haematological Oncology Unit ward round</td>
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<td>14.00 – 15.00</td>
<td>Adult Intensive Care Unit ward round</td>
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<tr>
<td>Friday</td>
<td>10.00 – 11.00</td>
<td>Bench round</td>
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<td></td>
<td>11.00 – 13.00</td>
<td>Transplantation, Paediatric Intensive Care, Paediatric Oncology Unit rounds</td>
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<td>14.00 – 15.00</td>
<td>Adult Intensive Care Unit ward round</td>
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**Summary Timetable for Virology**

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<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Activities</th>
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<tbody>
<tr>
<td>Monday</td>
<td>12.30-13.30</td>
<td>Papworth Transplant MDT meeting</td>
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<td></td>
<td>13.00-14.00</td>
<td>Infectious Diseases teaching</td>
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<td>Tuesday</td>
<td>13.00-14.00</td>
<td>Microbiology/Virology teaching</td>
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<tr>
<td>Wednesday</td>
<td>10.00-11.00</td>
<td>Joint Infectious Diseases</td>
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<td></td>
<td>13.00-14.00</td>
<td>Microbiology MDT</td>
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<td>16.00-17.00</td>
<td>Medical Staff Round</td>
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<td>16.00-18.00</td>
<td>HIV/GUM MDT</td>
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<td>Thursday</td>
<td>13.00-13.15</td>
<td>Case of the Week</td>
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<td></td>
<td>13.15-14.00</td>
<td>Departmental Seminar</td>
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<td>14.00-15.30</td>
<td>Adult Haematological Oncology Ward Round</td>
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<td>Friday</td>
<td>11.00-13.00</td>
<td>Transplantation, Paediatric Intensive Care, Paediatric Oncology Unit Rounds</td>
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<td></td>
<td>11.00-12.00</td>
<td>Multi-visceral Transplant MDT meeting</td>
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<td></td>
<td>14.30-15.00</td>
<td>Virology Case Discussion</td>
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Summary Timetable for Infectious Diseases

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<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Monday</td>
<td>09.00-12.00</td>
<td>Consultant ward round</td>
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<td>13.00-14.00</td>
<td>ID educational meeting</td>
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<td></td>
<td>14.00-17.00</td>
<td>Infectious Disease clinic</td>
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<td>Tuesday</td>
<td>09.00-12.00</td>
<td>Ward round</td>
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<td></td>
<td>14.00-16.00</td>
<td>Inpatient referrals</td>
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<td>Wednesday</td>
<td>10.00-11.00</td>
<td>Joint Infectious Diseases</td>
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<td></td>
<td>11.30-12.30</td>
<td>Microbiology MDT</td>
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<td></td>
<td>13.00-14.00</td>
<td>OPAT MDT meeting</td>
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<td></td>
<td>14.00-16.00</td>
<td>Medical Staff Round</td>
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<td></td>
<td>16.00-17.00</td>
<td>HIV clinic</td>
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<td></td>
<td></td>
<td>HIV MDT meeting</td>
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<tr>
<td>Thursday</td>
<td>09.00-12.00</td>
<td>OPAT clinic</td>
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<td>14.00-16.00</td>
<td>Ward work</td>
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<td>16.00-17.00</td>
<td>Medical student teaching</td>
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<td>Friday</td>
<td>09.00-12.00</td>
<td>Consultant ward round</td>
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<td>13.00-14.00</td>
<td>SpR clinical cases teaching</td>
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<td></td>
<td>14.00-17.00</td>
<td>Ward work or HIV clinic</td>
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Cambridge University Hospitals NHS Foundation Trust

Cambridge University Hospitals NHS Foundation Trust ("The Trust") incorporates Addenbrooke's Hospital, the Rosie Maternity Hospital and Fulbourn Hospital. Addenbrooke's Hospital (1100 beds) lies on the southern boundary of Cambridge City, occupying a site, which is shared by the University of Cambridge School of Clinical Medicine, the Medical Research Council, the Regional Blood Transfusion Centre, and the GSK Research Institute. Close links with the University have given the hospital an international reputation for converting research and development into practical health care.

The Rosie Maternity Hospital (94 beds and 19 Special Care Cots) is also located on the Addenbrooke's site, and includes the Regional Neonatal Intensive Care Baby Unit.

Fulbourn Hospital is situated on the outskirts of Cambridge, approximately 3 miles from the Addenbrooke's site. It provides the main inpatient base for general and specialised Psychiatric services, supplemented by outpatient and community services.

The Research activities subtended by these clinical units and the University of Cambridge are formally recognized as constituting the Cambridge Biomedical Research Centre, and have been accorded National Status as one of five Academic Health Centres in England and Wales.

The Trust employs some 7,500 staff and serves a local population of 0.5 million and provides specialist services at Regional and National Levels.

Public Health England (PHE) Clinical Microbiology and Public Health Laboratory (CMPHL)

The PHE CMPHL ("the Department") plays a dual role as both the Clinical Microbiology/Virology Laboratory and PHE Regional Laboratory and is located in the John Bonnett Clinical Pathology Laboratories block, located within Addenbrooke's Hospital. The PHE CMPHL provides microbiology laboratory services for hospitals in the Cambridge Health District and for general practitioners in local PCTs and also supplies microbiological services for environmental health investigations and fulfils other PHE functions.

Amongst the specialist services provided by PHE CMPHL are the liver, lung and heart transplant programmes administered by Addenbrooke's and Papworth Trusts. Regional specialties in Cambridge (including Neurosurgery and Neurology, Oncology, Haematological Medicine and Renal Transplantation and Dialysis) also make substantial use of the Department. Extensive clinical liaison to provide advice on the diagnosis and chemotherapy of microbial disease, and on control of infection is undertaken with regional and other clinical services. There is an 11-bedded isolation unit within Addenbrooke's Hospital for community and hospital acquired infections, supervised on a rotational basis by Infectious Diseases Physicians. A Consultant in PHE CMPHL is the Infection Control Doctor. A team of nurses in infection control
collaborate closely with staff of the laboratory, as do the Consultants in Communicable Disease Control for Cambridge and Huntingdon.

CMPHL provides an extensive microbiology service for Addenbrooke’s, Papworth, Hinchingbrooke and East and North Herts hospital NHS Trusts as well as local GP practices. In addition, it performs serological and molecular investigations on referred specimens from the other 18 laboratories in the East of England and Lincolnshire. Specimens for molecular diagnosis are received from throughout the UK. There are on-suite discard laboratory autoclaves and facilities for handling Hazard Group 3 organisms. With a bacteriology workload of over 470,000 specimens per year, Serology 187,000 specimens per year, Chlamydia 60,000 specimens per year, Molecular investigations 55,000 per year, the Department’s total throughput exceeds 815,000 specimens per year.

Accreditation
The Department has full CPA accreditation, and Royal College of Pathologists’ educational accreditation.

Personnel

Consultants

10 Consultant Bacteriologists
Dr N Brown (Addenbrooke’s site, Clinical Services Director, Infection Control Doctor),
Dr S Aliyu (Addenbrooke’s Site, Joint Appointment with Infectious Diseases)
Dr David Enoch (Addenbrooke’s site, Infection Control Doctor)
Dr J Sule (Addenbrooke’s site, part-time)
Dr F Cooke (Addenbrooke’s site, part-time)
Vacant post (Addenbrooke’s site)
Dr O Allen (Papworth site)
Dr M Gillham (Papworth site, Infection Control Doctor, part-time)
Dr R Kappeler (Papworth, part-time)
Dr J Baruah (Hinchingbrooke Hospital)

4 Consultant Virologists
Dr H. Jalal
Dr H Zhang
Dr K Rolfe
Dr Tim Wreghitt (Locum post, Part-time)

2 Academic Consultants
Dr E Torok (Clinician Scientist Fellow/Honorary Consultant in Infectious Diseases & Medical Microbiology)
Dr C Smith (0.2 WTE, Senior Lecturer/ Honorary Consultant Medical Virologist)

Other Career Medical Staff
1 NHS Professionals Flexible Careers Grade in Medical Microbiology

Senior Scientific Staff
3 AFC Band 8 Clinical Scientists (Bacteriology & Virology)
3 Research Assistants (Bacteriology & Virology)

Specialist Nurses
5 infection control nurses at the Addenbrooke’s site

FRCPath trainees
6 StRs in Microbiology
3 StR in Virology (1 Clinical Lecturer, 1 Infectious Disease/Virology, 1 StR virology)

Managerial Structure
In April 2003, the management CMPHL passed from the Public Health Laboratory Service to Public Health England (PHE). The Microbiology Laboratory, located at Papworth Hospital (which provides services to Hinchingbrooke Hospital), and managed as part of CMPHL was integrated into the Cambridge Laboratory in October 2011. Within the Trust, the Department of Medical Microbiology is part of the Pathology Directorate. The Clinical Services Director, Dr Nicholas Brown is accountable to the Director of Pathology for Addenbrookes clinical responsibilities.
Clinical Training
The trainee will be expected to follow the new medical microbiology curriculum and attain the standards detailed within it at http://www.rcpath.org/Resources/RCPath/Migrated%20Resources/Documents/T/FINAL_MICROBIOLOGY_CURRICULUM_M_June14.pdf. A major component will be training by apprenticeship under consultant supervision. The proportion of time spent on clinical training, including infection control, will comply with the Royal College of Pathologists recommendations.

Educational Supervisor
From the outset, the post-holder will have an Educational Supervisor who will act as mentor, and with whom an individual training programme is agreed, designed on an annual basis, to ensure specific training needs are met, leading to completion of training within 5 years.

Induction
All trainees must attend the induction courses run by the Hospital Trust and the PHE, and receive comprehensive induction packs. Formal induction will commence immediately the trainee joins the Department. The Departmental Safety Supervisor will provide the majority of the Health & Safety induction and maintain records of this.

Training Agreement
Guided by the College’s training curriculum, an annual training agreement (training and learning plan) will be drawn up by the trainee for discussion and approval by the educational supervisor. This training agreement is an important part of the documentation for appraisals. Guidance on writing training agreements is provided in Annex C.

Range of Clinical duties
The post-holder will participate in routine work of the Department in clinical liaison, laboratory diagnosis and infection control. This includes authorization of laboratory reports, dealing with telephone enquiries from clinicians and participating in ward rounds. The appointee will liaise closely with clinical colleagues concerning the diagnosis and management of patients, and infection control. These duties include liaison on a daily basis with specialist and non-specialist units at Addenbrooke’s and other hospitals, and with GPs. A Consultant Medical Microbiologist will closely supervise all these duties. Where appropriate, bench work training in all sections of the laboratory will be provided. The Department has a comprehensive collection of Standard Operating Procedures for laboratory operations, and all laboratory procedures undertaken within the Department. A separate SOP provides guidance on authorisation of reports by medical staff. As a Specialty Trainee, the post-holder will participate in the Department’s out-of-hours on-call rota, which includes attendance at the laboratory over weekends or bank holidays and operates on a 1 in 6 basis, with Banding to be confirmed (subject to change). An indicative weekly timetable of duties and training is shown above; this timetable may vary to meet individual training needs.

Teaching
Teaching responsibilities include tuition within the courses for which PHE CMPHL is responsible including to undergraduate medical students. All teaching staff are strongly encouraged to attend the excellent courses in teaching skills offered within the Trust. The post-holder will also be involved in the instruction of Health service personnel, including postgraduate doctors in training, nurses, Allied Health Professionals, and laboratory staff.

Additional duties
These will involve cover for the absence of colleagues on annual and study leave. Locums will not normally be engaged. All Specialist Registrars will be expected in the normal run of duties to cover for the occasional brief absence of colleagues. In addition, he/she will be expected to perform duties in occasional emergencies and unforeseen circumstances without additional remuneration, at the request of the Director of the laboratory, Regional Microbiologist and/or appropriate Consultant in consultation, where practicable, with colleagues, both senior and junior. Commitments arising under these provisions are however, exceptional, and practitioners will not normally be required to undertake work of this kind for prolonged periods or on a regular basis except where it enhances the trainee's career development.

Other main training components (see Annex E for details)
Clinical Audit - There is an active clinical audit programme within the Department and the Pathology Directorate. Trainees are expected to lead audit projects through the “audit cycle” under consultant supervision. The Trust Clinical Audit Department provides advice and support in all aspects of Clinical Audit.

Management - Relevant experience will be gained, under supervision, in planning departmental policies and developing the leadership qualities to implement them. Tutorials will be provided by senior laboratory staff on specific topics. Attendance at appropriate management meetings and training courses is encouraged. The trainee will participate, on a rotational basis, in the following administrative duties: chair of the ST training committee, secretary to the CMPHL District
Management Committee, membership of the laboratory technical committee, and organising the intra-Departmental lecture series. He or she should consider undertaking Acting-up consultant duties in the later stages of training.

Data management – training is provided through hands-on exposure, for example to audit projects, exercises in R&D, evaluation of information from the population served by the Department and from technical procedures applied in the laboratory. The trainee will have access to a PC shared with other StRs, providing access to the hospital network, and with a separate server space for word processing, Epi-info, Excel and Access databases and email, together with internet access providing links to Medical Databases.

Research and teaching – There are active clinical-oriented R&D activities in the Department that the trainee is encouraged to participate or collaborate on. All StR trainees participate in teaching medical students in their clinical years (tutorials).

Health & Safety – The Department of Microbiology has a Hazard Group 3 containment laboratory, and on-suite discard laboratory autoclaves. It is mandatory for trainees to participate in Health & Safety training. This will start at induction but will also include specific H&S training sessions and tutorials with senior laboratory staff. All trainees are required to comply with Trust, PHE and departmental Health & Safety policies and procedures.

Courses, Attachment or Rotation
The StR will be encouraged to attend relevant courses of post-graduate training. Training via attachment can be provided in the Departments of Infectious Diseases and Genitourinary Medicine. There will be attachments to Clinical Virology in accord with the current training curriculum recommendations.

Other training support
The trainee will be provided with office space, a desk; filing cabinet and shelf space. Appropriate bench space and facilities will be provided to undertake approved laboratory projects and training. Appropriate secretarial support will be provided. Trainees have free access to the departmental library with a comprehensive inventory of current texts and journals and access to the internet via the NHS net. The Addenbrooke’s Postgraduate Medical Centre and the University Clinical School Library are situated on-site at Addenbrooke’s Hospital.

Study leave will be granted in accordance with paragraphs 250-254 of the Terms and Conditions of Service for Hospital Medical and Dental Staff.

Assessment and Appraisal
Individual assessment and appraisal for all StR are provided to enhance professional development. These include formal work-based assessment, trainee-supervisor three monthly progress review and annual appraisal. These, together with academic appraisal, will inform the Educational or Academic Supervisor’s Report for the Annual Review of Competency Progression (ARCP) carried out by Health Education England East of England.

Other local facilities
There is a postgraduate medical centre situated within the School of Clinical Medicine on the Addenbrooke’s Hospital site. Library facilities for all hospital staff are provided by Cambridge University Medical Library, which is also located in the Clinical School building. The library, a branch of the main University Library, has extensive collections of books and journals covering clinical medicine, together with a growing range of computerised information sources. Hospital medical staff may also be eligible for a borrower's ticket at the main University Library.

The university city of Cambridge offers unrivalled educational facilities and diverse cultural, sporting and other leisure activities, including theatre and musical performances. The Fitzwilliam Museum is world-renowned.

For those with children of all ages, there is a full range of public and private educational institutions covering all age groups. There is a pre-school crèche on-site for the children of Addenbrooke’s staff.

There is a shopping concourse within the Hospital with excellent facilities - an Advice Centre, Bank, Café, Clothes Boutique, Dry Cleaners, Financial Advisory Services, Florist, Hairdressing salon, Handicraft shop, minimarket, Newsagent/stationer/confectioner, Shoe repair/Gift Shop, Solicitor and Travel Agent. There is a Food Court, which offers ‘fast food’ - sandwiches, hamburgers and pizzas, as well as more conventional options from early morning to late evening.

In addition, the Addenbrooke’s Frank Lee Centre provides staff with comprehensive sports facilities for swimming, squash, multi-sports hall, floodlit outdoor multi-sports facility, Profiles Fitness Suite and a bar with food.
Further details and advice
Interested applicants are advised to contact:

Dr Estee Torok
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Addenbrooke’s Hospital
Hills Road, Cambridge CB2 0QQ
Email: et317@cam.ac.uk
Tel: 01223 336845

Dr Fiona Cooke
Department of Microbiology
Box 236
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Email: fiona.cooke@addenbrookes.nhs.uk
01223 216826

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Tel: 01223 348129

Candidates are invited to visit the Department by appointment.
Annex A

Conditions of appointment

The post is subject to Terms and Conditions of NHS Hospital Medical and Dental Staff. For those candidates who meet the requirements as a Specialty Registrar the post is subject to the terms and conditions above. (Salary scale to be confirmed).

Newly-appointed STs may be eligible for reimbursement with the whole or part of the cost of their removal expenses, provided that the removal is necessary to comply with the PHE requirements concerning the place of residence.

Membership of the National Health Service Pension Scheme is available, unless an officer decides to opt out or is ineligible to join

Base
The post is based at the PHE CMPHL, Addenbrooke’s Hospital.

Indemnity
As the post-holder will only be indemnified for duties undertaken on behalf of Health Protection Agency. The post-holder is strongly advised to ensure that (s)he has appropriate professional defence organisation cover for duties outside the scope of the PHE and for private activity within PHE. For on call duties provided to other organisations as part of cross cover out of hours arrangements the NHS Litigation Authority has confirmed that those organisations will provide indemnity for the postholder.

Flexibility
The NHS and the Health Protection Agency (Scottish Centre for Infection and Environmental Health) are currently working in a climate of great change. It is therefore expected that all staff will develop flexible working practices both within the organisation on a cross-directorate basis, and with external organisations and relevant public health networks, to be able to meet the challenges and opportunities of working within the field of health protection.

Mobility
The post-holder will be expected to work at any establishment at any time throughout the duration of his/her contract, normally within the location of NSC.

Aspects of Confidentiality
The post-holder must at all times maintain the complete confidentiality of the material and information that they handle.

Public Interest Disclosure
Should a consultant have cause for genuine concern about an issue (including one that would normally be subject to the above paragraph) and believes that disclosure would be in the public interest, he or she should have a right to speak out and be afforded statutory protection and should follow local procedures for disclosure of information in the public interest.

Data Protection
If required to do so, obtain, process and/or use information held on a computer or word processor in a fair and lawful way. To hold data only for the specified registered purpose and to use or disclose data only to authorised persons or organisations as instructed.

Health & Safety
Employees must be aware of the responsibilities placed on them by the Health & Safety at Work Act (1974) also Food Hygiene Legislation to ensure that the agreed safety procedures are carried out to maintain a safe condition for employees, patients and visitors.

Centre/divisional directors - are responsible for co-ordinating health and safety activities in their centres/divisions and will determine the necessary management structure and arrangements. Directors will ensure that their actions and decisions at work reinforce the requirements of PHE’s health and safety policy and arrangements.

Managers - are responsible for implementing the Agency’s health and safety policies and arrangements and for ensuring that risk assessments, safe systems of work, control measures and staff training are up to date and effective. Managers will inspect premises, ensure accidents and incidents are reported/investigated and assist in auditing health and safety management arrangements.
All staff must comply with any health and safety training: report all accidents, incidents, illnesses and untoward occurrences to line management without undue delay and must not interfere with or misuse anything provided in the interest of the health, safety and welfare of other employees. The organisation has a no smoking policy.

**Equal Opportunities Policy**

It is the aim of the organisation to ensure that no job applicant or employee receives less favourable treatment on grounds of gender, religion, race, colour, sexual orientation, nationality, ethnic or national origins or is placed at a disadvantage by conditions or requirements which cannot be shown to be justifiable. To this end, there is an Equal Opportunities Policy and it is for each employee to contribute to its success.

**Diversity**

You are at all times required to carry out your responsibilities with due regard to the Agency's diversity policy and to ensure that staff receive equal treatment throughout their employment with the PHE.

**Smoking policy**

The Health Protection Agency has a policy that smoking is not allowed in the work place.

**Risk management**

All staff have a responsibility to report all clinical and non-clinical accidents or incidents promptly and, when requested, to co-operate with any investigation undertaken.

**Conflict of interests**

You may not without the consent of the PHE engage in any outside employment. In accordance with the Agency’s conflict of interest policy, you must declare to your manager all private interests, which could result potentially in personal gain as a consequence of your employment in the Agency. Interests that might appear to be in conflict should also be declared to your manager.

In addition, the NHS Code of Conduct and Standards of Business Conduct for NHS Staff (HSG 93/5) requires you to declare all situations where you or a close relative or associate has a controlling interest in a business (such as a private company, public organisation or other NHS voluntary organisation) or in any activity which may compete for any NHS contracts to supply goods or services to the PHE. You must therefore register such interests with the Agency, either on appointment or subsequently whenever such interests are gained. You should not engage in such interests without the written consent of the PHE, which will not be withheld unreasonably. It is your responsibility to ensure that you are not placed in a position that may give rise to a conflict between your private interest and your duties.

**Code of conduct for professionally qualified staff groups**

All staff are required to work in accordance with their professional group’s code of conduct (e.g. NMC, GMC, Department of Health Code of Conduct for Senior Managers, CIPD, etc).

**Criminal Record Bureau Checks (where relevant – This will be outlined on the Recruitment Requisition Form)**

Any applicant who is short-listed for this post will be asked to complete a disclosure form as the post-holder will be required to have contact with vulnerable adults or persons under the age of 18. The successful candidate will be subject to a criminal record check from the Criminal Records Bureau prior to the appointment being confirmed. The disclosure will include details of cautions, reprimands, and final warnings, as well as convictions if applicable.

**Appraisal**

All staff are required to partake in a joint annual review of their work.

**Values and Behaviours**

The PHE has developed and published a clear vision for the direction of the organisation. A set of values and behaviours have also been developed and agreed to underpin this vision and these are listed below. Applicants and employees will be expected to demonstrate an understanding of and commitment to these values and behaviours, which will be assessed through the recruitment, selection and appraisal processes.

1) **Our values**

   - **Striving for excellence**

   We strive for excellence and professionalism in all our activities to ensure we are respected and recognised as an expert organisation by the health and scientific community and by the public.
- **Respecting others**

We respect and value our staff as the cornerstone of the Agency’s success, we manage them fairly and we value our diversity as a source of strength.

- **Innovation**

We strive for continuous improvement and innovation in all aspects of our work and measure ourselves against the best in health protection.

- **Integrity**

We demonstrate open, honest and ethical behaviour in all our interactions, operating within clearly defined levels of accountability and authority.

- **Focus on quality service**

We are committed to meeting the needs of those we serve and work with by delivering the highest quality of service.

2) **Behaviours**

For all staff:

- Be an effective team worker, demonstrating respect for others and valuing diversity
- Take personal responsibility, learning from experience and sharing knowledge
- Focus on agreed outcomes and the needs of those we serve and work with
- Be flexible and positive about change
- Be aware of the impact of our own behaviour on others

In addition, for those staff with the responsibility for managing others:

- Give clear leadership to staff, leading by example and setting high standards
- Communicate often and clearly – face to face where possible
- Value and recognise the ideas and contributions of all team members, thanking them for their input and delegating work to develop them and realise their potential
- Ensure that resources and priorities are balanced appropriately
- Give regular feedback on performance and manage poor performance effectively
## Annex B

### Key organisations and personnel

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Office</th>
<th>Personnel / Contact Details</th>
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| **The Royal College of Pathologists**  
2 Carlton House Terrace, London SW1Y 5AF  
www.rcpath.org | Training and Educational Standards Dept  
Examinations Dept  
JCHPT  
CATT | Training and Educational Standards Manager  
020 7451 6741  
education@rcpath.org  
www.rcpath.org/education  
Examinations Manager  
020 7451 6757  
exams@rcpath.org  
www.rcpath.org/exams  
Director of Training and Educational Standards - Chair  
www.rcpath.org/index.asp?PageID=597  
Chair  
www.rcpath.org/index.asp?PageID=597 |
| **Royal College of Physicians**  
JCHMT | | Relevant for infectious diseases, metabolic medicine, haematology, immunology.  
Joint Committee on Higher Medical Training  
5 St Andrews Place  
Regent’s Park  
London NW1 4LB  
020 7935 1174  
www.jchmt.org.uk/ |
| **General Medical Council (GMC)**  
Registration Dept | | 178 Great Portland St, London W1W 5JE  
020 7580 7642  
website: [www.gmc-uk.org](http://www.gmc-uk.org) |
| **Specialist Training Authority (STA)** | | 70 Wimpole Street, London W1M 7DE  
020 7935 8587  
website: [www.sta-mrc.org.uk](http://www.sta-mrc.org.uk) |
<table>
<thead>
<tr>
<th>LETB</th>
<th>Postgraduate Dean</th>
<th>Professor Bill Irish</th>
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<tbody>
<tr>
<td></td>
<td>Deputy Postgraduate Dean</td>
<td>Dr Alys Burns Email: <a href="mailto:alys.burns@nhs.net">alys.burns@nhs.net</a></td>
</tr>
<tr>
<td></td>
<td>Specialist Training Committee Chairman and Programme Director Microbiology</td>
<td>Dr Jumoke Sule PHE CMPHL Tel: 01223 348129 Email: <a href="mailto:jumoke.sule@addenbrookes.nhs.uk">jumoke.sule@addenbrookes.nhs.uk</a></td>
</tr>
<tr>
<td></td>
<td>Programme Director Virology</td>
<td>Dr Hongyi Zhang PHE CMPHL Tel: 01223 348030 Email: <a href="mailto:hongyi.zhang@addenbrookes.nhs.uk">hongyi.zhang@addenbrookes.nhs.uk</a></td>
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<tr>
<td></td>
<td>Recruitment Helpdesk</td>
<td>Email: <a href="mailto:heee.recruitmenthelpdesk@nhs.net">heee.recruitmenthelpdesk@nhs.net</a></td>
</tr>
<tr>
<td>Addenbrooke’s Hospital</td>
<td>Medical Director for Pathology Dept</td>
<td>Jo Whittaker Email: <a href="mailto:Joanne.whittaker@addenbrookes.nhs.uk">Joanne.whittaker@addenbrookes.nhs.uk</a></td>
</tr>
<tr>
<td></td>
<td>Lead Educational Supervisor (Microbiology)</td>
<td>Dr Fiona Cooke PHE CMPHL Email: <a href="mailto:fiona.cooke@addenbrookes.nhs.uk">fiona.cooke@addenbrookes.nhs.uk</a></td>
</tr>
<tr>
<td></td>
<td>Lead Educational Supervisor (Virology)</td>
<td>Dr Hongyi Zhang PHE CMPHL Tel: 01223 348030 Email: <a href="mailto:hongyi.zhang@addenbrookes.nhs.uk">hongyi.zhang@addenbrookes.nhs.uk</a></td>
</tr>
<tr>
<td></td>
<td>Lead Educational Supervisor (Infectious Diseases)</td>
<td>Dr Andrew Carmichael Department of Medicine Box 157, Addenbrooke’s Hospital Email: <a href="mailto:ac71@medschl.cam.ac.uk">ac71@medschl.cam.ac.uk</a></td>
</tr>
<tr>
<td></td>
<td>Trust Personnel Dept</td>
<td>Miss Alison Risker Head of Medical Staffing Box 154, Addenbrooke’s Hospital CB2 2QW Email: <a href="mailto:Alison.risker@addenbrookes.nhs.uk">Alison.risker@addenbrookes.nhs.uk</a> 01223 586673</td>
</tr>
<tr>
<td></td>
<td>Occupational Health Dept</td>
<td>Dr Peter Baxter Occupational Health Dept Box 172, Addenbrooke’s Hospital Email: <a href="mailto:peter.baxter@addenbrookes.nhs.uk">peter.baxter@addenbrookes.nhs.uk</a></td>
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Current details are available at the Health Education England website: [https://www.hee.nhs.uk/he-e-your-area/east-england](https://www.hee.nhs.uk/he-e-your-area/east-england)
Annex C

Guidelines for Training – learning plan (training agreement) for StR

At the beginning of each training component the trainer and trainee should discuss the trainee's educational needs over the coming training period. In this regard, the trainee should take the initiative in drawing up a learning plan. It is intended that the learning plan should be a learner-centred approach and will take into account:

- the trainee’s previously acquired knowledge, skills and experience
- the objectives of the relevant Royal College of Pathologists core training programme
- the time, resources and educational priorities available in the current training placement

A learning plan to meet these needs should be discussed and agreed by the trainer and trainee, covering:

- the identification of appropriate education and training objectives to be achieved, covering skills, knowledge and attitudes to patients and colleagues and in line with the relevant Royal College of Pathologists core training programme. Any objectives, the achievement of which is a prerequisite for progression to the next stage in the training programme should be clearly identified as such
- how the training placement itself will help achieve these objectives
- any formal training that may be required and how this will be provided
- responsibilities the trainee has to secure his/her achievement of the objectives.

The agreed written learning plan should be signed off by both trainer and trainee and should be forwarded to the Chair of the Specialty Training Committee prior to the ARCP. It is the responsibility of the Training Committee to ensure that this plan is appropriate to the trainee's stage in the training programme. A sample pro forma is attached for guidance although learning plans already in use locally can continue to be used.
**LEARNING PLAN FOR SPECIALTY REGISTRARS**

<table>
<thead>
<tr>
<th>No.</th>
<th>Objective</th>
<th>Key tasks</th>
<th>Formal teaching/ training required</th>
<th>Criteria to assess satisfactory completion</th>
<th>Planned completion date</th>
<th>Date completed</th>
<th>Trainer's initials when completed</th>
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Plan agreed by ...................................... and ...................................... Date ......................................

(Trainer) (Trainee)
Annex D

PERSON SPECIFICATION and SELECTION CRITERIA (Attached to this document)
Annex E
Supplementary information on the training programme

GENERAL

The major component in training will be training by apprenticeship on clinical attachment (including Infection Control) under consultant supervision. This Royal College of Pathologist’s stipulates that 50-80% of the trainee’s time should be training by apprenticeship. For this post 25% of the time will be spent doing diagnostic and public health microbiology research.

There will be a named Consultant Supervisor, who will construct and oversee the individual training programme (see below) and act as mentor.

ROLE OF THE CONSULTANT SUPERVISOR

The Consultant Supervisor will supply reference copies of the Royal College of Pathologists' Core Training Programmes for Microbiology and Introduction to the StR Grade in the Pathology Specialties (reference copies downloadable from the College Website).

The Consultant Supervisor will introduce the Trainee to the most important texts and journals in Medical Microbiology and Virology held in the department.

The Consultant Supervisor will introduce the trainee to other important references (working party reports, local policies, etc.). At the Cambridge PHE Laboratory these are included in the Welcome Pack.

The Consultant Supervisor will introduce the trainee to the facilities of the local library, including Internet and CD-ROM search facilities.

The Consultant Supervisor will inform the trainee of the programme of Departmental and Hospital educational meetings (as listed elsewhere). The supervisor will ensure that the trainee has the opportunity to make presentations at such meetings from an early stage.

The Programme Director and Consultant Supervisor will ensure the Trainee is aware of forthcoming educational opportunities by circulating details of local and national meetings as they are advertised.

The Programme director and Consultant Supervisor will ensure that the Trainee is kept abreast of important developments in Medical Microbiology by circulating copies of official documents, reviews, etc., as they are published.

The Consultant Supervisor will discuss the role of membership of learned societies.

Registration with the Royal College of Pathologists is mandatory and should be undertaken at the earliest opportunity (registration form available at the College Website).

The Trainee will work with the Consultant Supervisor to produce a written annual training programme.

The Consultant Supervisor should meet regularly with the trainee for tutorials (including informal weekly tutorials, see below) and approximately three-monthly, to review progress against the training plan (see ‘Appraisal’, below).

CONSTRUCTION OF A PERSONAL TRAINING PROGRAMME (LEARNING PLAN)

The Trainee will draw up an annual individual training programme with the Supervisor, employing the Model Training Programme laid out below, in collaboration with the Programme Director in Medical Microbiology. The model programme will be modified as necessary in the light of the Trainee’s needs, previous experience and local training opportunities to produce a personal Training Programme. The individual timetable will be discussed with each trainee, but it is anticipated that most trainees will wish to sit the FRCPath Part 1 at the earliest opportunity.
The Training Programme will be constructed on starting the appointment, and will plan activity for the year ahead in detail. Activity in later years will be planned in less detail but will include major components such as FRCPath examinations. Progress against the plan will be reviewed at the three-monthly meetings with the Supervisor. Further detailed plans for the forthcoming year will be produced at the end of the first year, and annually thereafter.

The Trainee’s programme may be entered in the Trainee’s copy of the Royal College of Pathologists Training record for Medical Microbiology.

ONLINE TRAINING PORTFOLIO

The Trainee will maintain the Royal College of Pathologists Training Portfolio for Medical Microbiology. The Trainee will present this to the Supervisor before the annual ARCP.

APPRAISAL

Informal meetings with the Consultant Supervisor will take place according to the needs and stage of training. In the first year this should be at least monthly

The Three-Monthly Training Review summary chart should be completed by the trainee and discussed with the Supervisor at every three-monthly meeting. The Review supplements the Royal College of Pathologists Training Record for Medical Microbiology, presenting a summary of progress against the training plan in brief note form. It also allows important issues to be recorded for future action and maintains a written record of Supervisors’ and Trainee’ comments and appraisals. The Royal College of Pathologists Training Record for Medical Microbiology should be also be reviewed, and initialled by the Supervisor at these meetings, every six months. Appraisal will also be carried annually out by the academic supervisor.

Annual local and GMC satisfaction survey provides the trainee with opportunities to give feedback on the training programme.

Assessment – Annual Review of Competency Progress (ARCP)

The Trainee should copy and complete the Health Education England’s ARCP documentation and present them for the Annual Meeting. The trainee should discuss it with the supervisor. The Trainee should bring the completed form to the ARCP assessment meeting for review. Further information is available on the Royal College of Pathologists website – http://www.rcpath.org

COURSE COMPONENTS

BENCHWORK

The trainee will rotate through all sections of the laboratory according to the training agreement. Timing will be according to previous experience and individual needs.

The trainee should study relevant regulations and literature during this period and consider attending a relevant course (see below).

CLINICAL ATTACHMENT

The trainee will work closely with the Consultant Medical Microbiologists, training by apprenticeship in clinical liaison. The Consultant Medical Microbiologist on clinical duty will discuss the day’s clinical workload with the trainee and be available for prompt discussion of cases beyond the trainee’s expertise. The trainee will gain experience in the management of infection by frequent ward visits to discuss individual cases with clinical colleagues.

At Cambridge, when on clinical duty, the trainee will participate in ward rounds as detailed elsewhere. The trainee will make regular ward visits in order to gain direct experience of the role of Medical Microbiologist in the management of infection. The trainee will also be encouraged to develop individual links with a particular unit (an intensive care unit or ward with a large infective case load,
e.g., Haematological Oncology, Transplantation) and undertake joint clinical research projects and audit with the unit.

The trainee and Supervisor should consider the value of a one-week attachment to the Department of Genito-urinary Medicine’s clinic and a 2-week attachment to the Department of Infectious Diseases in the fourth year of STP training.

VIROLOGY

At least six months will be spent in virology. This will be divided throughout the rotation to comply with RCPPath curriculum requirements.

CONTROL OF HOSPITAL INFECTION

Experience in Infection Control will be gained through handling routine work during the clinical blocks and on-call, by accompanying the Infection Control Team on visits throughout the hospital, by attending the Trust’s Infection Control Committee on a rotational basis and by specific attachments.

The trainee is encouraged to attend the Hospital Infection Society/Centre for Infection Course on Hospital Infection Control, Colindale (see below).

TUTORIALS

These will be arranged in the host laboratory according to the trainees’ requirements, employing the expertise of local and Regional Medical Microbiologists.

The Trainee should also meet with the supervisor (or colleague) frequently for informal tutorials. The current work of the trainee and consultant could usefully be reviewed in this tutorial.

TEACHING COMMITMENTS

The trainee will be expected to contribute to local educational meetings. At Cambridge, the trainee will progress from participation in the Part I Pathology demonstrations to delivering small group tutorials and course lectures for medical undergraduates. Training in the art of teaching is by apprenticeship, courses are also available locally (see below).

MANAGEMENT

The trainee will become familiar with management issues through the involvement in day-to-day work of the laboratory, by attending the meetings listed below, and in the weekly consultant tutorial.

The trainee will attend General NHS Management course(s) (Appendix 3.1-4). Management issues in Medical Microbiology will be also be covered in local tutorials at Cambridge PHL and other laboratories on attachment.

Trainees should be offered the opportunity to join appointment committees for laboratory staff (as an observer) in the fifth year of training.

Trainees developing a special interest in management and administration may enrol in courses leading to a degree or diploma (eg. MBA, DMS).

The Trainee will gain experience in administration by participating, on a rotational basis, in appropriate laboratory activities. At Cambridge these include: secretary to the CMPHL committee, membership of the laboratory technical committee, organising the intra-Departmental lecture series and trainee tutorials, organising the medical trainees’ on-call rota.

The Trainee should act as an observer at a Departmental appointment committee on at least one occasion.
Committees

The trainee will become familiar with the form and content of committee work by attending the following:

1. **Departmental committees (full member)**
   - Bacteriology Technical Committee
   - Laboratory Management Committee
   - Safety Committee
   - Medical trainees’ committee (chair rotates among trainees)
   - Other *ad hoc* committees

2. **Hospital committees (observer status)**
   - Infection Control Committee
   - Legionella Control Committee
   - Drug and Therapeutics Committee

3. **Regional committees (observer)**
   - Easter Regional Medical Microbiology Group
   - Regional Epidemiology Forum
   - Eastern Regional Council (RCPath)

**AUDIT and Service Evaluation**

All medical personnel take part in Clinical Audit and Service Evaluation and the trainee will become familiar with its execution as part of the work of the laboratory. The trainee will be expected to participate in the collection and analysis of data required for local, regional and national audit. The trainee will be expected to participate in at least one audit project, annually. In the final year of training, the ST should perform a CPA vertical audit.

**RESEARCH**

Training in research will be based within CMPHL and supported by an Academic Supervisor who will guide the trainee in the establishment of a programme of research.

**ON-CALL**

**Bacteriology - Medical**

The trainee will participate in the on-call rota for out-of-hours advice in Medical Microbiology when judged ready by the Supervisor, usually within three months of the job.

**Bacteriology - Technical**

Technical on-call will be provided (by the BMS staff at Cambridge). The trainee should observe technical on-call on at least one occasion.

**FUNDING**

**Research**

The laboratory costs of research must be established and sources of funding identified by the Trainee and Supervisor and the other consultants. In general, funding for research will be sought from external funding bodies.

**Study**

Funding for courses, conferences and travel will be sought from PHE/Regional funds. Receipts for expenses must be retained for reimbursement.

Any shortfall will be divided between the trainee and laboratory research/educational funds, the proportion to be decided according to individual circumstances by the Supervisor and by agreement with other senior laboratory staff (the Core Group at Addenbrooke's Microbiology Laboratory).

**On call**
Reimbursement for telephone expenses incurred during the course of on-call duties is available from the Trust.

**Educational Meetings**

1. Monday 13.00 – Joint Infectious Diseases and Microbiology Trainees Educational Meeting
2. Tuesday 13.00 – Microbiology Trainee Tutorials
3. Wednesday 13.00 – Medical Staff Round
4. Thursday 12.15 – 13.30 Case of the Week and Microbiology Seminar
5. Friday 13.00 – Infectious Diseases Trainee Tutorials
6. Postgraduate seminars and courses at Addenbrooke’s Postgraduate Medical Centre

**Selected Courses for Trainee Medical Microbiologists**

The requirement for specific courses will be assessed on an individual basis and according to available funding. Trainees are encouraged to attend some of the following courses.

See also Training in Infection website hosted by National Electronic Library of Infection [http://www.trainingininfection.org.uk/IntegratedCRD.nsf/TII_Courses?OpenForm](http://www.trainingininfection.org.uk/IntegratedCRD.nsf/TII_Courses?OpenForm)

1. Management Courses include
   - Contact Addenbrooke’s Postgraduate Medical Centre for locally run courses
   - Clinical Management Course for Specialty Registrars in Pathology
     - Keele University *Usually in final year of training*
   - Association of Clinical Pathologists (ACP) Management Course in Laboratory Medicine for Pathologists in Training
     - University of Warwick.
     - 3 days.
     - Organised by Dr Hugh Mackay
     - Contact ACP Central Office, 221 Preston Road, Brighton, East Sussex, BN1 6SA. Tel 01273 561188
   - Management Training Programme for Pathologists (post FRCPath)
     - Association of Clinical Pathologists and School of Postgraduate Medical Education, University of Warwick
     - 1 day
     - Contact Carmel Parrott, School of Postgraduate Medical Education, Humanities Building, University of Warwick, Coventry CV4 7AL. Tel 01203 523913

2. MSc in Clinical Microbiology
   - The London Hospital Medical College
   - 1 day per week, 30 weeks per year, 2 year course

3. Parasitology Courses
   - Liverpool School of Tropical medicine Parasitology courses
     - [http://www.lstmliverpool.ac.uk/learning--teaching/lstm-courses/short-courses/lb01-laboratory-diagnosis-of-faecal-parasites](http://www.lstmliverpool.ac.uk/learning--teaching/lstm-courses/short-courses/lb01-laboratory-diagnosis-of-faecal-parasites)
   - OR
   - London School of Tropical Medicine and Hygiene Parasitology courses
4. Introductory Course on the Epidemiology and Surveillance of Infectious Diseases  
PHE Communicable Disease Surveillance Centre, Colindale  
3 days, Quarterly

5. Hospital Infection Society/Laboratory of Hospital Infection Control, Colindale  
5 days

6. Diploma in Hospital Infection Control (Dip HIC)  
London school of Hygiene and Tropical Medicine, Hospital Infection Society and Public Health laboratory service  
2 year, part-time course

7. Centre for Applied Medical Statistics, Department of Public Health and Primary Care,  
University of Cambridge offers courses in statistics  
http://www.phpc.cam.ac.uk/cams/cams-introductory-statistics-courses/

8. Mycology Courses  
British Society for Medical Mycology courses  
http://www.bsmm.org/conferences.asp  

OR  
PHE Identification of Pathogenic Fungi course  
Contact Mycology Reference Laboratory, Bristol

9. Antibiotic Susceptibility Testing  
BSAC Standardized Disc Susceptibility Testing Method Residential workshops 2012  
University of Wolverhampton  
http://www.bsac.org.uk/Susceptibility+Testing/Residential+Workshops+and+User+Group+Meetings

9. Training the Trainers courses are available at Addenbrooke’s Hospital. Contact Postgraduate Medical Centre

10. Presentation Skills Course  
Medical Photography, Addenbrooke’s Hospital

11. Preparation for the FRCPath practical examination  
Department of Medical Microbiology, St Thomas’ Hospital, London

12. The Wellcome Trust Sanger Institute offers a variety of courses in genomics and sequencing.  
http://www.wellcome.ac.uk/Education-resources/Courses-and-conferences/Advanced-Courses-and-Scientific-Conferences/Advanced-Courses/index.htm