SPECIALTY TRAINING CURRICULUM

FOR

POST-CCT FELLOWSHIP IN PHOTODERMATOLOGY

V1 - 2020

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1 Introduction

Dermatology is a broad specialty with significant photodermatology component. Dermatology specialty training addresses basic skills to assess patients with cutaneous photosensitivity disorders (the photodermatoses), and to perform ultraviolet radiation (UVR)-based photo(chemo)therapies and photodynamic therapy. However, the more complex aspects of photodermatology, including the evaluation, specific diagnosis and appropriate management of the range of photosensitive skin diseases, cannot be fully covered by the Dermatology curriculum and substantial subspecialty experience is required. Moreover, photodermatology requires knowledge, skill and expertise in many interrelated areas, from biochemistry, medical physics, immunology, paediatrics, rheumatology, skin cancer, through to epidemiology and public health issues. There is therefore a need to provide additional training for sub-specialisation in photodermatology.

This Fellowship relates to further training in photodermatology for trainees who have fulfilled the requirements for a CCT in dermatology. In order to prevent duplication of the Dermatology curriculum within the text of this document, the photodermatology content of the curriculum is attached as an appendix (Appendix 1). All the competencies, in addition to all aspects of the general dermatology curriculum as applied to photodermatology, are required and assumed as basic essentials in order to achieve competency at Fellowship level.

This document describes the competencies required for a UK NHS Consultant Dermatologist practising secondary and tertiary level photodermatology that are *over and above* those delivered by current higher specialist training in dermatology. It is anticipated that in order to achieve competency to photodermatology Fellowship standard, the programme length will be 1 year. This may vary where the Fellow is training flexibly or according to previous experience but it is unlikely that these competencies will be achieved in less than 12 months.

It is anticipated that most applicants for the Fellowship will apply following a successful Penultimate Year Assessment. Applicants can only take up the Fellowship once CCT in Dermatology has been attained.

Training centres will apply to be recognised for training capacity in photodermatology. The JRCPTB states that the development of these new training pathways is increasingly important as envisaged by the GMC 2013 “Shaping of Training” paper. The Quality Standards of centres providing this Fellowship will be enhanced in education, training and professional practice and would be expected to enhance benefit to patients, the public and the wider clinical community. It is understood that there may be several training centres which the GMC recognises for Fellowship training and that some centres may offer expertise in certain sections of the curriculum and that occupancy of these posts may vary from year to year.

The curriculum has been created by expert photodermatologists of the British Photodermatology Group in conjunction with the British Association of Dermatologists and the Royal College of Physicians through the SAC in Dermatology.

1 Rationale

1.1 Purpose of the curriculum

The purpose of this curriculum is to define the process of training and the competencies needed for the award of a post-CCT certificate of completion of training (post-CCT) in photodermatology.

1.2 Development

This curriculum was developed by the Medical Education Committee of the BAD (principal authors Prof Lesley Rhodes, Dr Jean Ayer), in tandem with a panel of photodermatologists of the British Photodermatology Group, and the Specialty Advisory Committee for Dermatology under the direction of the Joint Royal Colleges of Physicians Training Board (JRCPTB). This version ensures the curriculum meets GMC standards for Curricula and Assessment.

The content and teaching/learning methods were chosen by consensus after consultation with leading Dermatologists specialising in photodermatology and experienced in training.

1.3 Entry requirements

Entrants to Post-CCT Fellowship in photodermatology must have successfully completed Core Medical Training or Acute Care Common Stem training, and have completed Dermatology Specialty training or hold UK CCT in Dermatology.

Doctors will undergo competitive selection into Post-CCT photodermatology Fellowship posts using a nationally agreed person specification.

1.4 Enrolment with JRCPTB

Fellows are required to register for specialist training with JRCPTB at the start of their training programmes. Enrolment with JRCPTB, including the complete payment of enrolment fees, is required before JRCPTB will be able to recommend fellows for Post-CCT Certification. Fellows can enrol online at www.jrcptb.org.uk

1.5 Duration of training

Although this curriculum is competency based, the duration of training must meet the European minimum of one year for full time specialty training adjusted accordingly for flexible training (EU directive 2005/36/EC).

1.6 Flexible training

Fellows who are unable to work full-time are entitled to opt for flexible training programmes. EC Directive 93/16/EEC requires that:

- Part-time training shall meet the same requirements as full-time training, from which it will differ only in the possibility of limiting participation in medical activities to a period of at least half of that provided for full-time Fellows;
- The competent authorities shall ensure that the total duration and quality of part-time training of specialists are not less than those of full-time Fellows.

The above provisions must be adhered to. Ideally 2 flexible Fellows should share one post to provide appropriate service cover.

To date flexible training has inevitably been prolonged. With competency-based training, proof of completion of competencies may enable these Fellows to finish their training in a shorter time. This will be the decision of the trainers in discussion with the SAC.

2 Content of learning

2.1 Programme content and objectives

This section contains the content of the specialist curriculum for Post-CCT Fellowship in photodermatology. The duration will usually be 12-month, as full-time training.

2.2 Good Medical Practice

With the introduction of licensing and revalidation, the General Medical Council has translated Good Medical Practice into a Framework for Appraisal and Assessment, which provides a foundation for the development of the appraisal and assessment system for revalidation. The Framework can be accessed at http://www.gmc-uk.org/about/reform/Framework_4_3.pdf

The Framework for Appraisal and Assessment covers the following domains:
Domain 1 – Knowledge, Skills and Performance
Domain 2 – Safety and Quality
Domain 3 – Communication, Partnership and Teamwork
Domain 4 – Maintaining Trust

The "GMP" column in the syllabus defines which of the 4 domains of the Good Medical Practice Framework for Appraisal and Assessment are addressed by each competency. Most parts of the syllabus relate to "Knowledge, Skills and Performance" but some parts will also relate to other domains.

Appendix 1 covers the JRCPTB post-CCT fellowship educational standards framework including the core training components such as professional skills, leadership, management and research.

2.3 Syllabus

Each table below contains a broad statement describing the competencies contained in that table. These are divided into knowledge, skills and behaviours. For each of these the next column lists suitable assessment methods. The "Assessment Methods" shown are those that are appropriate as **possible** methods that could be used to assess each competency. It is not expected that all competencies will be assessed and that where they are assessed not every method will be used. See section 0 for more details.

"GMP" defines which of the 4 domains of the Good Medical Practice Framework for Appraisal and Assessment are addressed by each competency. See section 2.2 for more details.

The syllabus for higher training in photodermatology dermatology competencies elements over and above the Dermatology CCT syllabus; all pre-CCT competencies should have been attained. However, trainers in photodermatology will remain alert for deficiencies in areas that should already have been covered. For that reason, the whole syllabus is included below although the "over and above" elements essential to higher training in photodermatology are reflected in the GMP domains.

2.4 Syllabus Table of Contents

Section A

Progressive and Modular Elements of photodermatology developed from the August 2010 (adjusted 2012) Dermatology Curriculum

The photodermatology curriculum will build on the progressive and modular elements of the 2010 Dermatology Curriculum.

(https://www.jrcptb.org.uk/sites/default/files/2010%20Dermatology%20%28amendment%202012%29.pdf).

The Section A progressive elements and Section B modular elements from the pre CCT dermatology curriculum will normally have been attained prior to entry.

All the progressive and modular elements must be attained in all these domains by the end of the Fellowship training period.

For clarification, this means that completion of the Fellowship will encompass competency in the management of all dermatological conditions outlined in the Dermatology curriculum.

3.5 Section B

Level 1 competencies based on the roles and responsibilities of photodermatologists developed from the progressive and modular elements of the 2010 (amended 2012) Dermatology Curriculum competencies for basic specialist training in photodermatology.

The Fellowship will build on those competencies already incorporated into the photosensitivity disorders, photoinvestigation, photo(chemo)therapy, and photodynamic therapy module of the Dermatology curriculum.

1. Principles of photophysics, photochemistry and photobiology

Be able to understand and apply the basic principles of photoscience underlying photodiagnosis/investigation and phototherapy

Knowledge	Assessment Methods	Year Completed
Define chromophore and explain how non-ionising radiation interacts with the skin	CbD	F
Explain the relevance of action spectra	CbD	F
Describe the different types of light sources used for phototesting and photo(chemo)therapy	CbD	F
Explain minimal erythema dose (MED), minimal urticarial dose (MUD) and minimal phototoxic dose (MPD)	CbD	F
Explain the time course of UV erythema	CbD	F
Understand UV dose-response	CbD	F
Skills		
Demonstrate the application of different light sources used in photo(chemo)therapy	CbD, mini-CEX	F
Demonstrate the application of the different light sources used in phototesting	CbD, mini-CEX	F
Behaviours		
Be aware of anatomical variation in UV-erythemal sensitivity	CbD, mini-CEX	F
Be aware of the limitations of visual detection of erythema and adopt techniques to minimise variability	DOPS	F
Recognise the use of visual grading, colour comparison charts and reflectance spectrophotometry	CbD	F
Teaching and Learning Methods		
Detailed observation and discussion of issues under supervision in phototesting clinics within the photodermatology		
Independent learning		
Attendance on appropriate photobiology and photodermatology courses		

2. History, examination and diagnosis of the photodermatoses

Be able to undertake a detailed and appropriate photosensitivity history and examination, and be able to organise an appropriate investigation and management plan

Knowledge	Assessment Methods	Year Completed
Explain Fitzpatrick/modified Fitzpatrick skin typing	CbD	F

Identify time course of photosensitivity condition following sunlight exposure through history taking	CbD, mini-CEX	F
Identify photodistribution of condition through history taking and examination, and where available patient photographs	CbD, mini-CEX	
Identify through history and examination the morphological appearances of different photosensitivity conditions	CbD, mini-CEX	F
Identify the range and classes of photoactive medications which may be relevant to the photosensitivity condition through history taking	CbD, mini-CEX	F
Explain relevance of family history where appropriate in photosensitivity disorders	CbD, mini-CEX	F
Understand the adverse psychological impact of photosensitivity	CbD, mini-CEX	F
Understand the methods of photoprotection and characteristics of sunscreens	CbD, mini-CEX	F
Skills		
Adapt history, examination and phototesting approach for a paediatric patient	CbD, mini-CEX	F
Distinguish clinical patterns of different photosensitivity disorders	CbD, mini-CEX	F
Formulate appropriate detailed investigation programme	CbD, mini-CEX, PS	F
Interpret the investigations and correlate to history and examination findings	CbD, mini-CEX, MSF	F
Communicate photoinvestigation results to patients	CbD, mini-CEX, MSF	F
Evaluate severity of conditions through appropriate clinical scoring systems and assess impact of the conditions on quality of life	CbD, mini-CEX, PS, MSF	F
Consider when psychology input/referral is required	CbD, mini-CEX, PS, MSF	F
Discuss and explain normal photoinvestigation results to patients with presumed photosensitivity disorders	CbD, mini-CEX, PS, MSF	F
Behaviours		
Modify communication and history taking approach based on the individual needs of the patient	CbD, mini-CEX, MSF	F
Teaching and Learning Methods		
Detailed observation and discussion of issues under supervision in phototesting clinics within photodermatology		
Participation in photosensitivity MDT		
Attendance and participation in relevant national and international courses and meetings		
Independent reading		

3. Principles of treatment of photodermatoses

Be able to understand the treatments available for photodermatoses, and institute appropriate, personalised treatment plans

Knowledge	Assessment Methods	Year Completed
Explain specific treatments that may be appropriate in certain disorders including topical/systemic steroids, systemic immunosuppressive agents, antimalarial drugs, thalidomide	CbD, mini-CEX	F
Knowledge of precautions on prescription of certain treatments such as thalidomide and understanding of when they are appropriate to prescribe	CbD, mini-CEX	F
Be aware of emerging new treatments such as afamelanotide and biologics.	CbD, mini-CEX	F
Skills		
Formulate appropriate personalised treatment plans for patients with photosensitivity disorders	CbD, mini-CEX	F
Communicate effectively the reasons for cessation of identified photosensitisers and photocontact allergens to the patient and other medical professionals involved in their care	CbD, mini-CEX, PS, MSF	F
Identify most culpable photosensitising drug and formulate a management plan for patients taking more than one possible photosensitising agent	CbD, mini-CEX	F
Identify the need to phototest on suspected drug and then define the optimal interval to re-phototest off drug, which requires a background understanding of the drug turnover and elimination time	CbD, mini-CEX	F
Counsel and document appropriately for commencement of thalidomide in female patients of child bearing age	CbD, mini-CEX, PS	F
Discuss emerging treatments with patients with poorly controlled disease	CbD, mini-CEX, MSF	F
Behaviours		
Contribute to multidisciplinary team discussions for complex patients not responding to standard treatment approaches	CbD, mini-CEX, MSF	F
Teaching and Learning Methods		
Detailed observation and discussion of issues under supervision in phototesting clinics within photodermatology		
Participation in photosensitivity MDT		
Attendance and participation in relevant national and international courses and meetings		
Independent learning		

4. Narrowband (including monochromator) and broadband (including UVA and SSR) sources used in phototesting, and documentation of responses

To have clear working knowledge of the light sources used in photoinvestigation/photodiagnosis, and be able to document patient responses clearly and appropriately on investigation reports

Knowledge	Assessment Methods	Year Completed
Explain principles and purpose of monochromator phototesting	CbD	F

Explain the purpose of broadband UVA, UVB and solar simulated radiation (SSR) testing	CbD, mini-CEX	F
Identify in detail different monochromator test responses	CbD, mini-CEX	F
State limitations and side effects of monochromator testing	CbD	F
Identify in detail different responses to SSR/broadband UVA or UVB testing	CbD, mini-CEX	F
Skills		
Identify through history taking patients who are likely to have abnormal erythemal thresholds	CbD	F
Distinguish patterns of photosensitivity response using the monochromator, SSR and broadband iterative UVA or UVB testing	CbD, mini-CEX	F
Interpret provocation of the photosensitivity condition	CbD, mini-CEX, DOPS	F
Formulate appropriate detailed investigation reports based on monochromator, broadband UVA/SSR testing responses	CbD, mini-CEX, DOPS	F
Identify patients who are not appropriate for phototesting	CbD	F
Demonstrate application of monochromator, broadband iterative and SSR testing results to personalised management plans	CbD, mini-CEX	F
Adapt and read monochromator and broadband UVR testing procedures and results in paediatric patients	CbD, mini-CEX, DOPS	F
Discuss detailed management plans with photosensitive patients	CbD, mini-CEX	F
Behaviours		
Be aware of monochromator, broadband iterative UV and SSR testing and their role in diagnosis of photosensitive patients	CbD	F
Teaching and Learning Methods		
Detailed observation and discussion of issues under supervision in phototesting clinics within photodermatology Methods agreed by Educational Supervisor and Trainee		

5. Photocontact allergy and Photopatch Testing

Be able to undertake detailed investigation, diagnosis and management of patients requiring photopatch testing.

Knowledge	Assessment Methods	Year Completed
Explain detailed mechanisms involved in allergic photocontact dermatitis and distinction from phototoxic reactions	CbD	F
Explain the detailed indications for photopatch testing	CbD	F
Be aware of the use of the Standard European batteries of contact and photocontact allergens	CbD	F
Identify in detail allergens within the photopatch test series	CbD	F
State limitations and side effects of photopatch test results	CbD	F

Skills		
Demonstrate appropriate investigation skills in patients with suspected photocontact dermatitis	CbD, Mini-CEX	F
Distinguish clinical patterns of dermatitis that may be associated with photocontact allergy	CbD, Mini-CEX	F
Formulate appropriate detailed pre-photopatch test diagnosis	CbD, Mini-CEX	F
Select appropriate additional allergens for photopatch testing	CbD, Mini-CEX	F
Demonstrate application of photopatch tests and detailed instructions of patients during the photopatch test procedure	CbD, DOPS, Mini-CEX	F
Interpret photopatch test results, including distinction between irritant and allergic reactions and clinical relevance of results	CbD, Mini-CEX	F
Communicate and interpret test results to patients	CbD, Mini-CEX	F
Discuss detailed preparation of specific products for photopatch testing, including patient's own products	CbD, Mini-CEX	
Behaviours		
Recognise use of photopatch testing in the assessment of suspected photocontact dermatitis	CbD, Mini-CEX	F
Lead and contribute to multidisciplinary team including technologists, nursing and pharmacy staff	CbD, Mini-CEX, MSF	F
Teaching and Learning Methods		
Detailed observation and discussion with senior medical and allied health staff involved in photopatch testing		
Supervised outpatient photopatch test clinics with specialist consultants		
Independent study		
Attend appropriate course		
Methods agreed by Educational Guide and Fellow		

6. Immune-mediated/idiopathic photosensitivity disorders

To have detailed understanding of immune-mediated/ idiopathic photosensitivity disorders

Knowledge	Assessment Methods	Year Completed
Explain prevalence, histopathological findings, pathogenesis, aetiology, clinical features, differential diagnoses, phototesting results and management of polymorphic light eruption	CbD, mini-CEX	F
Explain prevalence, histopathological findings, pathogenesis, aetiology, clinical features, differential diagnoses, phototesting, patch and photopatch results and management of chronic actinic dermatitis	CbD, mini-CEX	F
Explain prevalence, histopathological findings, pathogenesis, aetiology, clinical features, differential diagnoses, phototesting results and management of juvenile springtime eruption	CbD, mini-CEX	F

Explain prevalence, histopathological findings, pathogenesis, aetiology, clinical features, differential diagnoses, phototesting results, HLA results and management of actinic prurigo	CbD, mini-CEX	F
Explain prevalence, histopathological findings, pathogenesis, aetiology, clinical features, differential diagnoses, phototesting results and management of solar urticaria	CbD, mini-CEX	F
Explain prevalence, histopathological findings, pathogenesis, aetiology, clinical features, differential diagnoses, phototesting results, EB viral load results and management of hydroa vacciniforme	CbD, mini-CEX	F
Skills		
Distinguish clinical patterns of the photosensitivity disorders	CbD, mini-CEX	F
Accurately diagnose patients with immune-mediated and idiopathic photosensitivity disorders	CbD, mini-CEX, MSF, PS	F
Identify systemic complications of photodermatoses such as EB virus in hydroa vacciniforme	CbD, mini-CEX	F
Communicate diagnosis and management of photosensitivity disorders, including appropriate photoprotective measures, local and systemic treatments, to patient and other health professionals	CbD, mini-CEX, MSF, PS	F
Behaviours		
Contribute to discussions of patients with immune mediated and idiopathic photosensitivity disorders at the specialist photosensitivity MDT meeting	CbD, mini-CEX, MSF	F
Teaching and Learning Methods		
Detailed observation and discussion of issues under supervision in phototesting clinics within photodermatology Independent study Attend appropriate course Methods agreed by Educational Guide and Fellow		

7. Drug Induced photosensitivity

To have a detailed working knowledge of drug induced photosensitivity

Knowledge	Assessment Methods	Year Completed
Explain prevalence, histopathological findings, pathogenesis, aetiology, clinical features, differential diagnoses, phototesting results and management of drug photosensitivity	CbD, mini-CEX	F
Understand and describe the most frequently encountered topical and oral photosensitising medications	CbD	
Identify the mechanistic differences between phototoxicity and photoallergy, and of differences that may be apparent clinically and on photoinvestigation	CbD, mini-CEX	F
Identify the major clinical patterns of cutaneous phototoxicity	CbD, mini-CEX	F
Explain the wash out periods of drug induced photosensitivity	CbD	F

Skills		
To distinguish clinical patterns of cutaneous phototoxicity and photoallergy through history and examination findings	CbD, mini-CEX	F
Interpret monochromator test results of patients with drug induced photosensitivity and understand optimal intervals for phototesting off drug	CbD, mini-CEX, DOPS	F
Communicate an appropriate management plan for patients with drug induced photosensitivity to patients and relevant health professionals	CbD, mini-CEX, PS, MSF	F
Behaviours		
Recognise the prevalence and nature of drug induced photosensitivity	CbD, mini-CEX	F
Recognise the use of monochromator testing in the detailed assessment of suspected drug induced photosensitivity patients	CbD, mini-CEX	F
Teaching and Learning Methods		
Detailed observation and discussion of issues under supervision in phototesting clinics within the photodermatology Independent study Attend appropriate course Methods agreed by Educational Guide and Fellow		

8. Photosensitive DNA Repair disorders and other photogenodermatoses

To have a good understanding of photosensitive DNA Repair disorders and other photogenodermatoses and ethical issues regarding genetic testing

Knowledge	Assessment Methods	Year Completed
Understand the incidence, inheritance, pathogenesis, typical and less typical clinical features at presentation, differential diagnoses, photoinvestigation findings, histopathology, and management of the photogenodermatoses	CbD, mini-CEX	F
Explain the inheritance patterns of Xeroderma Pigmentosum (XP), Cockayne syndrome and trichothiodystrophy	CbD	F
Describe DNA as genetic material and how mutations and variants affecting DNA and its repair contribute to photosensitivity disorders	CbD	F
Describe the chromosomal basis of inheritance and its relevance to photosensitivity disorders	CbD	F
Understand the subtypes of XP and the dermatological, neurological and other comorbities associated with specific subtypes, and their prognoses, and arrange appropriate multidisciplinary care	CbD, mini-CEX	F
Be aware of the photogenodermatoses with associated high risk of melanoma and keratinocyte cancers, and other cancers, and perform and arrange appropriate surveillance	CbD, mini-CEX	F
Understand photoprotection measures used in XP such as protective visors, UV-resistant face masks, wrap-around sun glasses, in addition to UV-resistant films on windows	CbD, mini-CEX	F

Understand when to suspect XP in patients who do not have photosensitivity clinically	CbD	F
Be aware that 'genetic tests' can include clinical examination, metabolite assays and imaging as well as analysis of nucleic acid, and know the clinical indications for ordering genetic tests	CbD	F
Understand the indications and correct performance of skin biopsy for specialist examination of DNA damage repair, and how to liaise with the relevant analytical centre	CbD	F
Be familiar with national guidelines that influence healthcare provision for those with genetic conditions	CbD	F
Be aware of support services for people with photogenodermatoses, including patient support groups such as the XP Support Group	CbD	F
Skills		
Draw and interpret a family tree where appropriate	CbD, mini-CEX	F
Be able to discuss genetic conditions in a non-directive, non-judgemental manner, being aware that people have different attitudes and beliefs about inheritance	CbD, mini-CEX, MSF	F
Know how to organise genetic and diagnostic testing, including how to access help via the local clinical genetics services and specialist national services	CbD, mini-CEX	F
Understand when and how to make a referral to Clinical Genetics and specialist national services	CbD, mini-CEX	F
Be able to discuss treatment/management and reproductive options available to patients/families with, or at risk of, a genetic condition	CbD, mini-CEX	F
Behaviours		
Recognise the importance of a detailed assessment in cases of suspected photogenodermatoses and the need to offer appropriate referral for comprehensive genetic counselling	CbD	F
Choose the correct specific investigations for diagnosis of XP, Cockayne syndrome and trichothiodystrophy	CbD	F
Recognise the other comorbities associated with specific subtypes of XP, including prognoses, and be aware of the essential need for multidisciplinary team input and to arrange or contribute to appropriate multidisciplinary care	CbD	F
Be aware of the need to foster close relations with Mohs and skin surgeons in these high-risk patients, and refer promptly and appropriately when melanoma and keratinocyte cancers are identified	CbD	F
Choose appropriate investigative routes which may include clinical examination, metabolite assays and imaging as well as analysis of nucleic acid	CbD	F
Recognise the clinical indications for ordering genetic tests and be aware of one's own professional limits in regard to managing genetic conditions	CbD	F

Recognise how to liaise with the relevant analytical centre in patients who require correct performance of a skin biopsy for specialist examination of DNA damage repair	CbD	F
Be aware that consultations involving the giving and discussion of genetics information may require more time	CbD	F
Be aware that genetic information impacts not only on the patient but also on their family	CbD	F
Be aware of the ethical issues involved in genetic testing, such as confidentiality, testing children, and pre-symptomatic testing	CbD	F
Be aware of national super-specialist multidisciplinary services for photogenodermatoses as well as support groups for patients such as the XP Support Group	CbD	F

Teaching and Learning Methods

Detailed observation and discussion of issues under supervision in phototesting clinics within photodermatology
Independent study

Attend appropriate course

Methods agreed by Educational Guide and Fellow

9. Photoaggravated disorders

To understand and identify that in some patients general dermatoses and connective tissue disorders can be photoaggravated

Knowledge	Assessment Methods	Year Completed
Explain prevalence, histopathological findings, pathogenesis, clinical features, differential diagnoses, and treatments for lupus erythematous (LE). Understand the classification of the different types of LE and how this influences the above parameters	CbD, mini-CEX	F
Be aware of other connective tissue disorders that are frequently photoaggravated, such as dermatomyositis	CbD, mini-CEX	F
Explain prevalence, histopathological findings, pathogenesis, clinical features, differential diagnoses, phototesting results and management for photoaggravated psoriasis	CbD, mini-CEX	F
Explain prevalence, histopathological findings, pathogenesis, clinical features, differential diagnoses, phototesting results and treatments for photoaggravated atopic eczema	CbD, mini-CEX	F
Explain prevalence, histopathological findings, pathogenesis, clinical features, differential diagnoses, phototesting results and treatments for photoaggravated Jessner's Lymphocytic Infiltrate	CbD, mini-CEX	F
Understand which conditions are commonly photoaggravated, e.g. LE, rosacea and which conditions appear to be photoaggravated in a minority of patients, e.g. eczema, psoriasis, Sweets syndrome	CbD, mini-CEX	F
Be aware of the extensive range of diseases that can occasionally be photoaggravated	CbD	F

Be aware of potential mechanisms of photoaggravation – for example induction of PLE triggering photoaggravation of psoriasis	CbD	F
Be aware of the comorbidities that may occur in the above and other photoaggravated conditions	CbD	F
Be aware of clinical guidelines on diagnosis and management of the above and other photoaggravated conditions, including LE	CbD	F
Be aware of support services relevant to patients with photoaggravated conditions, e.g. Lupus UK	CbD	F
Skills		
Distinguish clinical patterns of photoaggravated disorders	CbD, mini-CEX	F
Formulate appropriate detailed management for photoaggravated disorders	CbD, mini-CEX, MSF	F
Communicate management of photoaggravated disorders, including appropriate photoprotective measures, local and systemic treatments, to patient and other health professionals	CbD, mini-CEX, PS, MSF	F
Behaviours		
Recognise the importance of prompt identification of photoaggravated disorders and the impact it has on patients	CbD, mini-CEX	F
Teaching and Learning Methods		
Detailed observation and discussion of issues under supervision in phototesting clinics within photodermatology Independent study Methods agreed by Educational Guide and Fellow		

10. Phytophotodermatitis

To understand, identify and manage phytophotodermatitis		
Knowledge	**Assessment Methods**	**Year Completed**
List plants that may cause phytophotodermatitis	CbD	F
Explain chemicals and mechanisms responsible for phytophotodermatitis	CbD	F
Identify in detail timelines and presentations of phytophotodermatitis	CbD	F
Understand the controlled therapeutic application of this reaction in PUVA	CbD	F
Skills		
Distinguish clinical patterns of phytophotodermatitis	CbD, mini-CEX	F
Communicate appropriate management plans for patients affected by phytophotodermatitis	CbD, mini-CEX, PS, MSF	F
Behaviours		

Recognise reactions due to skin contact with plant phototoxins	CbD, mini-CEX	F
Teaching and Learning Methods		
Detailed observation and discussion of issues under supervision in phototesting clinics within the photodermatology Independent study Attend appropriate course Methods agreed by Educational Guide and Fellow		

11. The cutaneous porphyrias

To develop a working knowledge of the cutaneous porphyrias, and how to investigate and manage them appropriately

Knowledge	Assessment Methods	Year Completed
Explain the differences between erythropoietic and hepatic porphyrias	CbD	F
Explain the inheritance patterns of the cutaneous porphyrias	CbD	F
Outline the haem biosynthesis metabolic pathway	CbD	F
Explain inheritance, prevalence, metabolic pathway abnormality, clinical presentation, investigations and treatments for EPP	CbD, mini-CEX	F
Explain inheritance, prevalence, metabolic pathway abnormality, clinical presentation, investigations and treatments for VP	CbD, mini-CEX	F
Understand and explain features of severe scarring porphyrias e.g. CEP	CbD	F
Explain how to test for cutaneous porphyrias including blood, urine and faecal samples where appropriate	CbD	F
Be aware of patient associations for those with cutaneous porphyrias, including the British Porphyria Association	CbD	F
Demonstrate an understanding of acquired porphyrias including PCT, underlying causes and comorbidities	CbD	F
Skills		
Draw and interpret a family tree where appropriate	CbD, mini-CEX	F
Advise patients of patient associations/support services	CbD, mini-CEX, PS, MSF	F
Be aware of the need for a multidisciplinary approach particularly involving hepatology, clinical genetics, an acute porphyria service and haematology as appropriate in managing porphyria patients	CbD, mini-CEX, PS, MSF	F
Identify systemic complications such as liver disease in EPP and PCT, acute attacks in VP, and multisystem disease particularly bones, blood and eyes in CEP	CbD, mini-CEX, PS, MSF	F
Know how to organise genetic testing, and how to access help from	CbD, mini-CEX, MSF	F

specialist porphyria services		
Behaviours		
Be aware of one's own professional limits in regard to managing porphyrias and know when and where to seek advice	CbD, mini-CEX, MSF	F
Be aware that, because porphyrias are often multi-system disorders, comprehensive patient management is likely to involve liaison with other healthcare professionals	CbD, mini-CEX, MSF	F
Recognise the need to offer appropriate referral for comprehensive genetic counselling	CbD, mini-CEX	F
Teaching and Learning Methods		
Detailed observation and discussion of issues under supervision in phototesting clinics within photodermatology		
Independent study and access of resources such as the BNF, http://www.porphyria.uct.ac.za/ \and www.drugs-porphyria.org/languages/UnitedKingdom/selsearch.php?l=gbr		
Attend appropriate courses		
Methods agreed by Educational Guide and Fellow		

12. Topical Photodynamic Therapy (PDT) including Daylight PDT

To be able to select appropriate patients and indications for PDT, and deliver and supervise a PDT service for patients with low risk lesions/conditions. Become equipped to set up a topical PDT service.

Knowledge	**Assessment Methods**	**Year Completed**
Define in detail the photodynamic reaction and principles of PDT	CbD	F
Describe in detail the mechanisms underlying PDT effects on tissue, both direct and indirect	CbD	F
Explain the national NICE, BPG/BAD and European guidelines for PDT	CbD	F
State detailed indications and contraindications for PDT	CbD	F
State response and recurrence rates of PDT indications with reference to different (pro)drugs, light sources and protocols	CbD	F
State the range of adverse effects of PDT and how they differ in different forms of PDT	CbD	F
Describe the range of available (pro)drugs and light sources and understand systemic PDT approaches	CbD	F
Describe the range of available PDT regimens	CbD	F
Explain how to manage a PDT service and how to set up a new service, including patient pathway, business plan, staff roles, facilities, documentation, follow up appointments	CbD	F
Explain in detail the principles and requirements of daylight PDT	CbD	F
Define a robust clinical governance system for PDT service that includes resolution rate and adverse event data	CbD	F

Understand the importance of affiliation of PDT services with a skin cancer MDT	CbD	F
Skills		
Select and prescribe appropriate PDT treatment regimen	CbD, MSF	F
Assess, counsel and obtain informed consent from patients prior to both conventional and daylight PDT	mini-CEX, CbD, PS	F
Demonstrate application of both conventional and daylight PDT and instruction of patients during the procedure.	DOPS, mini-CEX, CbD, PS	F
Counsel patient in PDT after-care and follow up arrangements	mini-CEX, CbD, PS	F
Diagnose and manage adverse events precipitated by PDT	mini-CEX, CbD	F
Identify patients failing to respond to treatment, reasons for this and management options	mini-CEX, CbD	F
Behaviours		
Lead and contribute to multidisciplinary team including nursing, technology, physics and medical personnel	CbD, MSF	F
Recognise in depth the importance of NICE and BAD/BPG guidelines for PDT	CbD, MSF	F
Recognise in depth the limits of therapy	CbD, MSF	F
Attend and participate in skin cancer MDT		
Teaching and Learning Methods		
Observation and supervised performance in consultant led PDT clinics		
Suitable external course		
Independent study		
Methods agreed by Educational Guide and Fellow		

13. Phototherapy (UVB and UVA1) and photochemotherapy (PUVA): methods, indications and clinical governance

Be able to select appropriate patients and indications for phototherapy including specialised phototherapy.

Be able to deliver and supervise specialised phototherapy services.

Knowledge	Assessment Methods	Year Completed
Explain the national guidelines for photo(chemo)therapy, including the NICE-approved BAD/BPG minimum standards guidelines for photo(chemo)therapy services	CbD	F
State what topical or systemic therapies may be used in addition to the course of phototherapy to optimise the response	CbD	F

State adverse effects of different forms of common and specialised therapy, both acute and chronic	CbD	F
Define management of patients who have had large numbers of UV treatments including patients in whom treatment options are limited	CbD	F
Define treatment response	CbD	F
Explain the photo(chemo)therapy-erythema dose-response and time-course and apply this to clinical practice	CbD	F
Explain methods used to minimise risk during treatment	CbD	F
Explain how phototoxicity can occur during treatment and what can be done to minimise this	CbD	F
Understand how photosensitising drugs may interact with phototherapy regimens	CbD	F
Identify suitable patients for photopheresis	CbD	F
Describe phototherapy equipment, MED/MPD test devices and appropriate UV protective eyewear	CbD	F
Describe safety and quality control of UV equipment, including role of medical physics personnel	CbD	F
Explain how to set up a new service and how to introduce new developments in phototherapy	CbD	F
Describe how managed clinical networks and clinical standards in phototherapy can be used to improve the safety and effectiveness of ultraviolet phototherapy	CbD	F
Skills		
Formulate appropriate detailed record keeping	mini-CEX, CbD	F
Select appropriate treatment regimens including for specialised indications including scleroderma and photosensitivity conditions	mini-CEX, CbD	F
Identify patients failing to respond to treatment, reasons for this and management options	mini-CEX, CbD	F
Identify patients who have had high levels of exposure or other risk factors for skin cancer and should be offered skin surveillance	mini-CEX, CbD	F
Evaluate the efficacy of UV therapies and be able to apply suitable discharge criteria, including in specialised indications such as scleroderma and vitiligo	mini-CEX, CbD	F
Diagnose and manage the range of acute and chronic adverse events precipitated by all phototherapies.	mini-CEX, CbD	F
Behaviours		
Contribute to multidisciplinary team including phototherapy nurses and technologists, medical physics and medical personnel and to clinical governance meetings involving photo(chemo)therapy	CbD, MSF	F
Recognise importance of the NICE, BAD/BPG and EDF guidelines and practice standards for photo(chemo)therapies	CbD, MSF	F
Recognise the full range of different forms of phototherapy and photo(chemo)therapy	CbD	F

Teaching and Learning Methods
Observation and supervised performance in consultant led dedicated phototherapy specialist centres and local units, for long enough to gain experience in both common and specialised disorders treated with the full range of photo(chemo) therapies Supervised performance in outpatient treatment centre, both regular planned sessions and ad hoc reviews of patients in difficulty Observation and work with allied health staff in delivery of the full range of photo(chemo)therapies Suitable external course, Independent study Methods agreed by Educational Supervisor and Trainee

14. Photo(chemo)therapy sources/dosimetry

To understand and apply the principles of UVB/PUVA dosimetry to ensure safe clinical practice

Knowledge	Assessment Methods	Year Completed
Explain pathway of responsibility for UV dosimetry at treatment centre	CbD	F
Understand how meter calibration is performed	CbD	F
Define designated patient irradiance (DPI)	CbD	F
Understand both direct and indirect methods of calculating DPI	CbD	F
Explain the relationship between DPI and patient dose	CbD	F
Be aware of the lamp replacement policy	CbD	F
Describe safety and quality control of UV equipment, including role of medical physics department	CbD	F
Skills		
Readily distinguish between PUVA and UVB meters and select appropriate treatment regime	CbD, mini-CEX	F
Calculate DPI value within treatment centre	DOPS	F
Calculate patient dose using DPI value	DOPS	F
Identify patients failing to respond to treatment, reasons for this and management options	CbD, mini-CEX	F
Behaviours		
Consult local safety guidelines before administering treatment	CbD, mini-CEX	F
Review patient dose archives during treatment course and is able to apply suitable discharge criteria	CbD, mini-CEX	F
Consult national dosimetry and calibration, BAD/BPG and NICE guidelines	CbD, mini-CEX	F
Teaching and Learning Methods		
Detailed observation and discussion of issues under supervision in photo(chemo)therapy clinics		

Read appropriate guidelines including those of the BAD

Suitable external course

Methods agreed by Educational Guide and Fellow

15. Sun-exposure and Photoprotective measures

A good knowledge of photoprotective measures and the risks and benefits of sun-exposure

Knowledge	Assessment Methods	Year Completed
Outline the health risks and benefits of sun-exposure	CbD	F
Explain mechanistic differences between absorber and reflector sunscreens	CbD	F
Outline behavioural and physical measures to photoprotect including sitting in the shade, clothing and hats and window films	CbD	F
Understand the physical properties of sunscreen including photostability and antioxidant activity that may contribute to efficacy	CbD	F
Outline the relationship between SPF and MED	CbD	F
Understand different methods used to calculate UVA protection from sunscreens	CbD	F
Define the factors influencing SPF variability	CbD	F
Understand the role of visible light sunscreens and when clinically appropriate to prescribe them	CbD	F
Demonstrate understanding of newer photoprotective agents that are of clinical interest	CbD	F
Aware of the drivers of sun seeking and photoprotection behaviour	CbD	F
Skills		
Formulate appropriate photoprotection management plans personalised to the patient demonstrating knowledge of available sunscreens	CbD, mini-CEX, PS	F
Appropriately counsel patients on photoprotection and Vitamin D source	CbD, mini-CEX, PS	F
Understand the literature on skin cancer, sun exposure and photoprotection including the trials of photoprotection and skin cancer risk	CbD, mini-CEX	F
Demonstrate appropriate application of sunscreen	DOPS	F
Appropriately counsel patients on risks of sun-exposure personalised to skin type and action spectrum of photosensitivity	CbD, mini-CEX, PS	F
Behaviours		
Recognise importance of photoprotective measures in healthy, photosensitive and skin cancer-prone patients	CbD, MSF	F

Lead and contribute to sun exposure and photoprotective counselling in patients	CbD, PS, MSF	F
Teaching and Learning Methods		
Detailed observation and discussion of issues under supervision in photodermatology departments Independent study Read BAD/BPG guidance reports and those of other national authorities including NICE and PHE Observe and work with allied health and phototherapy staff in delivery of photoprotection education Attend appropriate course Methods agreed by Educational Guide and Fellow		

16. Photocarcinogenesis, Photoageing and Photodermatology-related histopathology

To understand mechanisms contributing to photoageing and photocarcinogenesis and to understand histopathological changes in photodermatology.

Knowledge	**Assessment Methods**	**Year Completed**
Describe histological appearances of the range of photodermatoses	CbD	F
Be aware of the heightened risk of skin cancers in certain photodermatoses	CbD	F
Understand mechanisms of photocarcinogenesis and the histological changes in melanoma and keratinocyte cancer	CbD	F
Identify solar elastosis and actinic granulomas histologically	CbD	F
Understand histological differences between atrophic and hypertrophic photoageing, and relationship to keratinocyte cancers	CbD	F
Skills		
Identify patients who are at increased risk of developing skin cancers	CbD, mini-CEX	F
Formulate appropriate management plans	CbD, mini-CEX	F
Interpret dermatohistopathology reports in conjunction with clinical and photobiological findings	CbD, mini-CEX, PS	F
Communicate findings and management plan effectively and sensitively with patients	CbD, mini-CEX, PS	F
Behaviours		
Lead and contribute to photoprotective counselling personalised to patients through history, examination and biopsy findings where appropriate	CbD, mini-CEX, PS	F
Teaching and Learning Methods		
Detailed observation and discussion of issues under supervision in photodermatology departments Independent study		

Liaison with histopathology consultant on selected slides of photosensitivity conditions

Attend appropriate course

Methods agreed by Educational Guide and Fellow

17. Public Health and Epidemiology

Be aware of public health and epidemiological aspects of photodermatology

Knowledge	Assessment Methods	Year Completed
Explain detailed epidemiological principles in relation to photosensitivity disorders and skin cancer	CbD	F
Describe photosensitivity prevalence in relation to clinic data and general population data	CbD	F
Describe prevalence of melanoma and keratinocyte cancers	CbD	F
Be aware of the role and function of photodermatology societies including the British Photodermatology Group (BPG) and the European Society for Photodermatology (ESPD)	CbD	F
Demonstrate awareness of the BAD sun-awareness campaign and the CR-UK/DH Sunsmart campaign	CbD	F
Skills		
Demonstrate detailed understanding of public health and epidemiological issues relevant to photosensitivity disorders and skin cancers	DOPS, Mini-CEX	F
Behaviours		
Recognise epidemiological principles to analyse disease burden in the clinic and in the general population	CbD, MSF	F
Recognise the use of data relative to disease burden by regulatory authorities	CbD, MSF	F
Recognise the role of national and international societies in responding to data relating to disease burden	CbD, MSF	F
Teaching and Learning Methods		
Detailed observation and discussion of public health and epidemiological issues under supervision in photodermatology departments		
Attendance at relevant national and international meetings		
Methods agreed by Educational Supervisor and Trainee		

18. Leadership, Management and Research in Photodermatology

Be aware of the importance of leadership, management and research to photodermatology services

Knowledge	Assessment Methods	Year Completed
Understand management and leadership in photodermatology through discussion with senior photodermatologists, attendance at centre meetings, and/or participation in committees and working groups	CbD	F
Understand the importance of taking on leadership roles through mentorship of junior colleagues in photodermatology	CbD	F
Be aware of the importance of research to clinical and practice developments in photodermatology	CbD	F
Understand research GCP training and regulatory processes	CbD	F
Skills		
Demonstrate understanding of how to put together a business case appropriate to photodermatology services	CbD	F
Demonstrate leadership through chairing a meeting, course or educational event in photodermatology	CbD, MSF	F
Demonstrate understanding of how to manage time and resources efficiently, ensuring cost effective practice	CbD, MSF	F
Undertake a research project in photosensitivity disorders/ photoprotection	CbD	F
Undertake an audit or quality improvement project in photodermatology	AA, CBD, MSF	F
Attend or organise a departmental photo journal club or teaching event	CbD, MSF, TA	F
Participate in MDT, Trust or regional working party relating to policy or service development for the photodermatology service.	CbD, MSF	F
Behaviours		
Provide leadership, development and career management for junior colleagues	CbD, MSF	F
Promote excellence in teaching and learning	CbD, mini-CEX, MSF	F
Attend and present at national/international meetings, disseminating and learning about new developments within photodermatology	CbD, mini-CEX	F
Demonstrate involvement in photodermatology research with the goal of a manuscript publication	CbD, mini-CEX	F
Foster good working relationships within the multidisciplinary health care teams and specialist groups locally and nationally.	mini-CEX, MSF	F
Teaching and Learning Methods		
Membership of BPG and encourage attendance at BPG, ESP and ESPD conferences		

Attend the ESPD and/or UK postgraduate courses in photodermatology

Apply for BPG or other available travel or research fellowship, if appropriate

Methods as agreed with educational supervisor

4 Learning and Teaching

4.1 The training programme

The organisation and delivery of postgraduate training is the statutory responsibility of the General Medical Council (GMC), which devolves responsibility for the local organisation and delivery of training to the JRCPTB and SAC. Responsibility for the organisation and delivery of Post-CCT Fellowship training in photodermatology is the remit of the employing Trust under supervision of the SAC (Appendix 1-3).

Appendix 1 covers the Modular Elements of Photodermatology developed from the August 2010 (amended 2012) Dermatology Curriculum

Appendix 2 covers the JRCPTB post-CCT Fellowship educational standards framework including core training components such as professional skills, leadership, management and research.

Appendix 3 covers the JRCPTB post-CCT Fellowship educational standards framework for entry criteria, duration of training, selection process, NHS Trust responsibilities and JRCPTB responsibilities.

Appendix 4 covers the JRCPTB guidelines for the Educational Guide for post-CCT Fellowships including the main duties and responsibilities.

Each training programme will have some individual differences, but should be structured to ensure comprehensive cover of the entire curriculum. The sequence of training should ensure appropriate progression in experience and responsibility. The training provided at each training site is defined to ensure that, during the programme, the entire curriculum is covered and also that unnecessary duplication and educationally unrewarding experiences are avoided.

4.2 Teaching and learning methods

The curriculum will be delivered through a variety of learning experiences. Fellows will learn from practice, clinical skills appropriate to their level of training and to their attachment within the department.

Fellows will achieve the competencies described in the curriculum through a variety of learning methods. There will be a balance of different modes of learning from formal teaching programmes to experiential learning 'on the job'. The proportion of time allocated to different learning methods may vary depending on the nature of the attachment.

This section identifies the types of situations in which fellows will learn.

Learning with Peers - There are many opportunities for Fellows to learn with their peers. Local postgraduate teaching opportunities allow fellows of varied levels of experience to come together for small group sessions

Work-based Experiential Learning - The content of work-based experiential learning is decided by the local faculty for education but includes active participation in:

- New and review clinics of patients with photosensitivity disorders: After initial induction, Fellows will review patients in outpatient photodermatoses clinics, under supervision. The degree of responsibility taken by the Fellows will increase as competency increases.

- After initial induction, Fellows will carry out readings of monochromator phototesting, provocation and photopatch testing under supervision. The degree of responsibility taken by the Fellow will increase as competency increases.
- New and review clinics and treatment sessions in PDT, PUVA and Phototherapy: Fellows will review patients in outpatient sessions. The degree of responsibility taken by the Fellows will increase as competency increases.
- Fellow will under supervision become competent in performance of the topical PDT procedure.
- Fellows will attend clinics that include patients with cutaneous porphyria and photogenodermatoses.
- Multi-disciplinary team and national photodermatology meetings: Fellows will take opportunities to attend meetings where clinical problems are discussed with other disciplines, providing excellent experience of observation of clinical reasoning.

There should be appropriate levels of clinical supervision throughout training with increasing clinical independence and responsibility as learning outcomes are achieved (see Section 5: Feedback and Supervision).

Independent Self-Directed Learning:
Fellows will use this time in a variety of ways depending upon their stage of learning. Suggested activities include:

- Reading, including web-based material
- Maintenance of personal portfolio (self-assessment, reflective learning, personal development plan)
- Maintenance of logbook
- Audit and research projects
- Reading journals
- Achieving personal learning goals beyond the essential, core curriculum

Other learning models:
Each training centre will provide a variety of additional training opportunities in addition to work-based experiential learning. These will include:

- Clinical and clinico-pathological meetings – departmental and regional clinical meetings where fellows can participate in the detailed discussion of challenging clinical problems.
- Journal Club, or similar. Usually organised on a departmental basis, and used in a small group format to discuss journal articles, research, textbooks of dermatology, recent national meetings.
- Active participation in audit, both self-directed and departmental meeting to include data collection and presentation

Formal Study Courses and meetings - Time made available for formal courses and meetings is encouraged, subject to local conditions of service. These include:

Courses: UK photodermatology/phototherapy courses (Dundee/London); postgraduate schools of the European Society for Photodermatology (ESPD; www.espd.eu.com) and of the European Society for Photobiology (ESP; www.photobiology.eu).

Meetings: Annual meetings of the British Photodermatology Group (BPG symposium at the BAD annual congress); European Society for Photodermatology (ESPD) symposium (adjacent to EADV congress); USA Photodermatology Society (www.photomedicine.org, adjacent to AAD congress); and Biannual congresses of the European Society for Photobiology (ESP).

An example of weekly timetable (below) and indicative numbers of patients (Section 5.3) is shown:

	AM	PM
Monday	Photosensitivity clinic	Personal study
Tuesday	Photosensitivity clinic	Porphyria clinic/ Photobiology clinical research
Wednesday	Personal study	Photo(chemo)therapy clinic
Thursday	Photosensitivity clinic	Skin cancer MDT/CPD /Teaching/Audit
Friday	Photodynamic Therapy clinic	Photodynamic Therapy clinic/Administration

5 Assessment

The domains of Good Medical Practice will be assessed using both workplace-based assessments and examination of knowledge and clinical skills, which will sample across the domains of the curriculum i.e. knowledge, skills and behaviour. The assessments will be supplemented by structured feedback to Fellows within the Post-CCT fellowship training programme for photodermatology. Assessment tools will be both formative and summative and will be selected on the basis of their fitness for purpose.

5.1 The assessment system

The purpose of the assessment system is to:

- enhance learning by providing formative assessment, enabling Fellows to receive immediate feedback, measure their own performance and identify areas for development;
- drive learning and enhance the training process by making clear what is required of Fellows and motivating them to ensure they receive suitable training and experience;
- provide robust, summative evidence that Fellows are meeting the curriculum standards during the training programme;
- ensure Fellows are acquiring competencies within the domains of Good Medical Practice*;*
- assess Fellows' actual performance in the workplace;
- ensure that Fellows possess the essential underlying knowledge required for their specialty;
- inform the Convened Panel, identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme;
- identify Fellows who should be advised to consider changes of career direction.

The integrated assessment system comprises workplace-based assessments. Individual assessment methods are described in more detail below.

Workplace-based assessments will take place throughout the training programme to allow Fellows to continually gather evidence of learning and to provide Fellows with formative feedback. They are not individually summative but overall outcomes from a number of such assessments provide evidence for summative decision making. The number and range of these will ensure a reliable assessment of the training relevant to their stage of training and achieve coverage of the curriculum.

5.2 Assessment Blueprint

In the syllabus (2.3) the "Assessment Methods" shown are those that are appropriate as **possible** methods that could be used to assess each competency. It is not expected that all competencies will be assessed and that where they are assessed not every method will be used.

5.3 Assessment methods

The following assessment methods are used in the integrated assessment system (Appendix 2-3):

Workplace-based assessments (WPBAs)

- Mini-Clinical Evaluation Exercise (mini-CEX)
- Direct Observation of Procedural Skills (DOPS)
- Multi-Source Feedback (MSF)
- Case-Based Discussion (CbD)
- Patient Survey (PS)
- Audit Assessment (AA)
- Teaching Assessment (TA)

Other methods of assessment

- Clinical supervisors report
- Logbook of photosensitivity patients seen (150 patients)
- Logbook of monochromator readings performed (150 patients)
- Logbook of provocation test readings performed (150 patients)
- Logbook of photopatch test readings performed (50 patients)
- Logbook of number of patients assessed for PDT (50 patients)
- Logbook of number of patients assessed for photochemotherapy (100 patients)
- 1 audit assessment
- 1 Teaching assessment
- Attendance record
- Educational Guide's report

These methods are described briefly below. More information about these methods including guidance for fellows and assessors is available in the ePortfolio and on the JRCPTB website www.jrcptb.org.uk. Workplace-based assessments should be recorded in the fellow's ePortfolio and logbook. The workplace-based assessment methods include feedback opportunities as an integral part of the assessment process, this is explained in the guidance notes provided for the techniques.

Multisource feedback (MSF)
This tool is a method of assessing generic skills such as communication, leadership, team working, reliability etc, across the domains of Good Medical Practice. This provides objective systematic collection and feedback of performance data on a Fellow, derived from a number of colleagues. 'Raters' are individuals with whom the Fellow's works, and includes doctors, administration staff, and other allied professionals. The Fellow will not see the individual responses by raters, feedback is given to the trainee by the Educational Guide.

Mini-Clinical Evaluation Exercise (mini-CEX)
This tool evaluates a clinical encounter with a patient to provide an indication of competence in skills essential for good clinical care such as history taking, examination and clinical reasoning. The Fellow receives immediate feedback to aid learning. The mini-CEX can be used at any time and in any setting when there is a Fellow and patient interaction and an assessor is available

Direct Observation of Procedural Skills (DOPS)
A DOPS is an assessment tool designed to assess the performance of a Fellow in undertaking a practical procedure, against a structured checklist. The Fellow receives immediate feedback to identify strengths and areas for development.

Case based Discussion (CbD)
The CbD assesses the performance of a Fellow in their management of a patient to provide an indication of competence in areas such as clinical reasoning, decision-making and application of medical knowledge in relation to patient care. It also serves as a method to document conversations about, and presentations of, cases by Fellows. The CbD should include discussion about a written record (such as written case notes, out-patient letter, discharge summary). A typical encounter might be when presenting newly referred patients in the out-patient department.

Patient Survey
Patient Survey address issues, including behaviour of the doctor and effectiveness of the consultation, which are important to patients. It is intended to assess the Fellow's performance in areas such as interpersonal skills, communication skills and professionalism by concentrating solely on their performance during one consultation.

Audit Assessment Tool
The Audit Assessment Tool is designed to assess a Fellow's competence in completing an audit. The Audit Assessment can be based on review of audit documentation OR on a presentation of the audit at a meeting. If possible the Fellow should be assessed on the same audit by more than one assessor.

5.4 Decisions on progress (Convened Panel)

The Convened Panel is the formal method by which a Fellow's progression through her/his training programme is monitored and recorded. Trusts are responsible for organising and conducting Convened Panels under supervision of the RCP and SAC. The evidence reviewed by Convened Panels should be collected in the Fellow's ePortfolio and logbook.

The Panel Decision Aid is included in section 5.5, giving details of the evidence required of fellows for submission to the Convened Panels.

5.5 Convened Panel Decision Aid

The Convened Panel decision aid shows how the panel can review the Fellow's portfolio for evidence of competence required at the end of each year. The decision aid should be used in conjunction with the syllabus in section 3.3. The decision aid lists the minimum number of satisfactory assessments expected. These assessments should be sampled across the competencies required for that year.

It is not expected that every competence will have been individually assessed, but that a range of different competencies will have been sampled using the assessment methods available. It is the Fellow's responsibility to organise these assessments with their Educational Guide in a timely fashion throughout the training year.

Assessments

Minimum satisfactory assessments sampled during the year:

- 10 photodiagnosis mini-CEX
- 10 monochromator phototest reading DOPS
- 10 photoprovocation reading DOPS
- 5 TL-01 MED readings
- 5 PUVA MPD readings
- 5 photopatch test reading DOPS
- 5 PDT DOPS and 4 mini-CEX
- 10 CbD
- 1 MSF
- 1 patient survey

Other documents to be reviewed at Convened Panel:

- Clinical supervisors report
- Logbook of photosensitivity patients seen (150 patients)
- Logbook of monochromator readings performed (150 patients)
- Logbook of provocation test readings performed (150 patients)
- Logbook of photopatch test readings performed (50 patients)
- Logbook of number of patients assessed for PDT (50 patients)
- Logbook of number of patients assessed for photo(chemo)therapy (100 patients)
- 1 audit assessment
- 1 teaching assessment
- 1 research conference presentation/manuscript
- Attendance record
- Educational Guide's report

5.6 Final Assessment

Regular appraisals (at least every 3 months) will be conducted. The penultimate appraisal prior to the anticipated certification date will include an external assessor from outside the training programme. JRCPTB/SAC and the Trust will coordinate the appointment of this assessor. At the end of the training program a Convened Panel will review evidence of competence. This panel will consist of at least 1 Photodermatologist, 1 other Dermatologist and 1 Trust representative.

5.7 Complaints and Appeals

The MRCP(UK) office has complaints procedures and appeals regulations documented in its website which apply to all examinations run by the Royal Colleges of Physicians.

All workplace-based assessment methods incorporate direct feedback from the assessor to the fellow and the opportunity to discuss the outcome. If a fellow has a complaint about the outcome from a specific assessment this is their first opportunity to raise it.

Appeals against decisions concerning in-year assessments will be handled at Trust level and Trusts are responsible for setting up and reviewing suitable processes. If a formal complaint about assessment is pursued this should be referred in the first instance to the Clinical Director/Lead.

6. Supervision and feedback

6.1 Supervision

All elements of work in training posts must be supervised with the level of supervision varying depending on the experience of the Fellow and the clinical exposure and case mix undertaken. Outpatient and referral supervision must routinely include the opportunity to personally discuss all cases if required. As training progresses the Fellow should have the opportunity for increasing autonomy, consistent with safe and effective care for the patient.

Fellows will at all times have a named Educational Guide and Clinical Guide, responsible for overseeing their education (Appendix 3). A named Research supervisor with suitable experience of research will be responsible for overseeing their research activities. Depending on local arrangements these roles may be combined into a single role of Educational Guide.

The responsibilities of supervisors have been agreed with the National Association of Clinical Tutors and the Academy of Medical Royal Colleges as below:

Educational supervisor (guide)
A trainer who is selected and appropriately trained is responsible for the overall supervision and management of a specified Fellow's educational progress during a training placement or series of placements. The Educational Supervisor (Guide) is responsible for the fellow*'s Educational Agreement.*

Clinical supervisor (guide)
A trainer who is selected and appropriately trained is responsible for overseeing a specified Fellow's clinical work and providing constructive feedback during a training placement. Some training schemes appoint an Educational Supervisor (Guide) for each placement. The roles of Clinical and Educational Supervisor (Guide) may then be merged.

The educational guide will be allocated to the Fellow at the beginning of the year. In addition to day-to-day supervision, educational guides will meet formally with their Fellows four times per year. At the first meeting the educational objectives for the year and a personal development plan (PDP) will be agreed. The PDP should be based firmly on the syllabus objectives for the year. The space for 'methods agreed by educational guide and Fellow' should be used to define how the fellow will acquire the competencies planned for the year. The Fellow and educational guide should both sign the educational agreement in the e-portfolio at this time, recording their commitment to the training process.

Subsequent meetings will be a dialogue between Fellow and educational guide and will review progress and take into account the supervisor's observations of the fellow's performance, feedback from other clinical guides, and analysis and review of workplace-based assessments. Attendance at educational events should also be reviewed. The PDP can be modified at these meetings.

Towards the end of the year of training a formal summative assessment of the fellow's evidence of competencies and training progression will take place. This will provide a structured assessment of the Fellow's progress, based on assessment methods as above and will form the basis of the educational guide's report, which will inform the Convened Panel process as supportive evidence.

The Educational Guide, when meeting with the Fellow, should discuss issues of clinical governance, risk management and any report of any untoward clinical incidents involving the Fellow. The Educational Guide should be part of the clinical specialty team. Thus if the clinical directorate (clinical director) have any concerns about the performance of the Fellow, or there were issues of doctor or patient safety, these would be discussed with the Educational Guide. These processes, which are integral to fellow development, must not detract from the statutory duty of the trust to deliver effective clinical governance through its management systems.

Opportunities for feedback to Fellows about their performance will arise through the use of the workplace-based assessments, regular appraisal meetings with guides, other meetings and discussions with guides and colleagues, and feedback from Convened Panel.

6.2 Appraisal

A formal process of appraisals and reviews underpins training. This process ensures adequate supervision during training, provides continuity between posts and different supervisors and is one of the main ways of providing feedback to Fellows. All appraisals should be recorded in the ePortfolio and logbook.

7 Managing curriculum implementation

The Trusts are responsible for quality management, GMC/JRCTBP will quality assure the educational providers and they are responsible for local quality control, managed by the Trust. The role of the Colleges in quality management remains important and will be delivered in partnership with the Trust. The College role is one of quality review of Trust processes and this will take place within the SACs on a regular basis.

Clinical and Educational Guides will be clinicians fully competent in their area of clinical supervision (Appendix 3). They will be appointed by the Trust. They will be trained in supervision, appraisal and assessment. Courses for this will be regularly available in Trust. Nationally there are

regular meetings for Educational Supervisors in dermatology, organised by the SAC and BAD education Sub-committee. These meetings include updates on new methods of assessment and bench-marking exercises to ensure equitable national standards for workplace-based assessments.

Standards of training and assessment will be regularly reviewed by the SAC using the GMC – recommended tools of the fellow survey, trainer survey, and programme visits if required.

7.1 Intended use of curriculum by trainers and fellows

This curriculum and ePortfolio are web-based documents which are available from the Joint Royal Colleges of Physicians Training Board (JRCPTB) website www.jrcptb.org.uk.

The educational guides and trainers can access the up-to-date curriculum from the JRCPTB website and will be expected to use this as the basis of their discussion with fellows. Both trainers and fellows are expected to have a good knowledge of the curriculum and should use it as a guide for their training programme.

Each Fellow will engage with the curriculum by maintaining a portfolio and logbook. The Fellow will use the curriculum to develop learning objectives and reflect on learning experiences.

In addition it is anticipated that the e-portfolio version of the curriculum and logbook will allow mapping of each assessment to the Fellow's own copy of the syllabus to demonstrate appropriate sampling of the curriculum.

It is important that the Educational Guide is aware of the requirement of each Fellow to cover all the elements of the curriculum. Progress will be reviewed at each educational guide meeting and the Convened Panel.

7.2 Recording progress

On enrolling with JRCPTB fellows will be given access to the ePortfolio for photodermatology. The ePortfolio allows evidence to be built up to inform decisions on a Fellow's progress and provides tools to support Fellow's education and development.

The Fellow's main responsibilities are to ensure the ePortfolio and logbook are kept up to date, arrange assessments and ensure they are recorded, prepare drafts of appraisal forms, maintain their personal development plan, record their reflections on learning and record their progress through the curriculum.

The educational guide's main responsibilities are to use ePortfolio and logbook evidence such as outcomes of assessments, reflections and personal development plans to inform appraisal meetings. They are also expected to update the Fellow's record of progress through the curriculum, write end-of-attachment appraisals and supervisor's reports.

Log books (preferably electronic and uploaded to the e-portfolio) recording monochromator readings, photoprovocation readings, photopatch readings, PDT cases treated and PUVA assessments must be maintained as indicated in content of learning (3.3 above).

8 Curriculum review and updating

The specialty curriculum will be reviewed and updated with minor changes on an annual basis. Curriculum review is a standing item on the agenda for the SAC. As clinical practice changes with

time, it will be necessary to amend the curriculum accordingly. Advice will be sought from the BPG and the BAD.

The curriculum should be regarded as a fluid, living document and the SAC will ensure to respond swiftly to new clinical and service developments. In addition, the curriculum will be subject to three-yearly formal review within the SAC. This will be informed by curriculum evaluation and monitoring. The SAC will have available:

- The Fellow's survey, which will include questions pertaining to their specialty (GMC to provide)
- Specialty-specific questionnaires (if applicable)
- Reports from other sources such as educational guides, service providers and patients.
- Informal Fellow feedback during appraisal.

Evaluation will address:

- The relevance of the learning outcomes to clinical practice
- The balance of work-based and off-the-job learning
- Quality of training in individual posts
- Feasibility and appropriateness of on-the-job assessments in the course of training programmes
- Current training affecting the service

Evaluation will be the responsibility of the JRCPTB and GMC. These bodies must approve any significant changes to the curriculum.

Interaction with the NHS will be particularly important to understand the performance of specialists within the NHS and feedback will be required as to the continuing needs for that specialty as defined by the curriculum.

Fellow contribution to curriculum review will be facilitated through the involvement of fellows in local faculties of education and through informal feedback during appraisal and College meetings.

The SAC will respond rapidly to changes in service delivery. Regular review will ensure the coming together of all the stakeholders needed to deliver an up-to-date, modern specialty curriculum. The curriculum will indicate the last date of formal review monitoring and document revision.

9 Equality and diversity

The Royal Colleges of Physicians will comply, and ensure compliance, with the requirements of equality and diversity legislation, such as the:

- Race Relations (Amendment) Act 2000
- Disability Discrimination Act 1995
- Special Educational Needs and Disabilities Act 2001
- Data Protection Acts 1984 and 1998

The Federation of the Royal Colleges of Physicians believes that equality of opportunity is fundamental to the many and varied ways in which individuals become involved with the Colleges, either as members of staff and Officers; as advisers from the medical profession; as members of the

Colleges' professional bodies or as doctors in training and examination candidates. Accordingly, it warmly welcomes contributors and applicants from as diverse a population as possible, and actively seeks to recruit people to all its activities regardless of race, religion, ethnic origin, disability, age, gender or sexual orientation.

Deanery quality assurance will ensure that each training programme complies with the equality and diversity standards in postgraduate medical training as set by GMC.

Compliance with anti-discriminatory practice will be assured through:

- monitoring of recruitment processes;
- ensuring all College representatives have attended appropriate training sessions prior to appointment or within 12 months of taking up post;
- ensuring fellows have an appropriate, confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature;
- monitoring of College Examinations;
- ensuring all assessments discriminate on objective and appropriate criteria and do not unfairly disadvantage trainees because of gender, ethnicity, sexual orientation or disability (other than that which would make it impossible to practise safely as a physician). All efforts shall be made to ensure the participation of people with a disability in training.

In order to meet its obligations under the relevant equal opportunities legislation, such as the Race Relations (Amendment) Act 2000, the MRCP(UK) Central Office, the Colleges' Examinations Departments and the panel of Examiners have adopted an Examination Race Equality Action Plan. This ensures that all staff involved in examination delivery will have received appropriate briefing on the implications of race equality in the treatment of candidates.

All Examiner nominees are required to sign up to the following statement in the Examiner application form "I have read and accept the conditions with regard to the UK Race Relations Act 1976, as amended by the Race Relations (Amendment) Act 2000, and the Disabilities Discrimination Acts of 1995 and 2005 as documented above."

In order to meet its obligations under the relevant equal opportunities legislation such as the Disability Discrimination Acts 1995 and 2005, the MRCP(UK) Management Board is formulating an Equality Discrimination Plan to deal with issues of disability. This will complement procedures on the consideration of special needs which have been in existence since 1999 and were last updated by the MRCP(UK) Management Board in January 2005. MRCP(UK) has introduced standard operating procedures to deal with the common problems e.g. Dyslexia/Learning disability; Mobility difficulties; Chronic progressive condition; Blind/Partially sighted; Upper limb or back problem; Repetitive Strain Injury (RSI); Chronic recurrent condition (e.g. asthma, epilepsy); Deaf/Hearing loss; Mental Health difficulty; Autism Spectrum Disorder (including Asperger Syndrome); and others as appropriate. The Academic Committee would be responsible for policy and regulations in respect of decisions on accommodations Be offered to candidates with disabilities.

The Regulations introduced to update the Disability Discrimination Acts and to ensure that they are in line with EU Directives have been considered by the MRCP(UK) Management Board. External advice was sought in the preparation of the updated Equality Discrimination Plan, which has now been published.

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11 Appendices

Appendix 1: The 2010 (updated 2012) Pre-CCT Dermatology Curriculum

6a. Photosensitivity and Photodiagnosis

To be able to diagnose and manage patients with a photosensitive disease
To be able to appropriately refer patients for monochromator light testing and photoprovocation testing

Knowledge	Assessment Methods	GMP
Define electromagnetic spectrum, including UVB, UVA, visible light	SCE, CbD	1
Define the term “photosensitivity”	SCE, CbD	1
Describe classification of photosensitivity disorders	SCE, CbD	1
Explain the mechanisms underlying photosensitivity disorders	SCE, CbD	1
State clinical features of the photosensitive disorders	SCE, CbD	1
State common exogenous photosensitisers – topical, drug and dietary	SCE, CbD	1
Describe indications for phototesting and photopatch testing	SCE, CbD	1, 2
Describe appropriate range of investigations for photosensitive patient	SCE, CbD	1, 2
Describe procedures for phototesting and photopatch testing	SCE, CbD	1, 2
Describe light sources for MED, provocation and photopatch testing	SCE, CbD	1
Define safety procedures for use of ultraviolet radiation sources	SCE, CbD	2
Describe pathology tests that assist photodiagnosis, i.e. on blood, urine, stool and skin samples, including porphyrin and autoantibody tests, and their roles	SCE, CbD	1
Describe management of photosensitivity disorders, including photoprotective measures and topical and systemic medications	SCE, CbD	1
Skills		
Detect patient with photosensitivity disorder	mini-CEX, CbD	1
Perform appropriate history and examination of photosensitive patient	mini-CEX, CbD	1
Recognise patterns of clinical features occurring in different photosensitivity conditions and how they assist diagnosis	mini-CEX, CbD	1
Describe administration of phototesting and photopatch testing	mini-CEX, CbD	1
Interpret results of monochromator testing, provocation testing and photopatch testing	mini-CEX, CbD	1
Interpret results of pathology tests utilised in photodiagnosis	mini-CEX, CbD	1
Communicate test results and diagnosis of photosensitivity disorders to patient and other health professionals	mini-CEX, CbD, PS	1,3
Select appropriate patients for phototesting and recognise importance of results.	MSF, CbD	1, 2

Communicate management of photosensitivity disorders, including appropriate photoprotective measures, local and systemic treatments, to patient and other health professionals	mini-CEX, CbD, PS	1,3
Behaviours		
Recognise possibility of cutaneous photosensitivity in appropriate patients	CbD, mini-CEX	1
Contribute to multidisciplinary photodiagnostic team	MSF	3
Teaching and Learning Methods		
Independent study		
Postgraduate course		
Observation and performance within specialist outpatient unit dedicated to evaluation of photosensitive patients		
Journal club		
Methods agreed by Educational Supervisor and Trainee		

6b. Phototherapy and Photochemotherapy

To be able to select appropriate patients for phototherapy and photochemotherapy To be able to deliver and supervise phototherapy and

Knowledge	Assessment Methods	GMP
Describe the mechanisms underlying beneficial and hazardous effects of phototherapy and photochemotherapy on tissue	CE, CbD	1
State indications and contraindications for phototherapy and photochemotherapy	CE, CbD	1, 2
Define which form of therapy should be used and its delivery (eg topical, local, systemic, broadband UVB, Narrow band UVB, PUVA)	CE, CbD	1
Explain ultraviolet dosimetry and treatment regimens	CE, CbD	1, 2
State what topical or systemic therapies may be used in addition to the course of phototherapy to optimise the response	CE, CbD	1, 2
State adverse effects of different forms of therapy	CE, CbD	1
Define management of patients who have had large numbers of UV treatments.	CE, CbD	1, 2
Describe phototherapy equipment, MED/MPD test devices and UV protective eyewear	CE, CbD	1, 2
Describe safety and quality control of UV equipment, including role of medical physics department	CE, CbD	1, 2, 3
Explain how to set up a new service	SCE, CbD	1, 2
Discuss new developments in phototherapy	SCE, CbD	1
Describe UVA1 as a phototherapy treatment modality.	SCE, CbD	1
Describe how clinical governance systems can be used to improve the safety and effectiveness of ultraviolet phototherapy	SCE, CbD	1,2

Skills		
Communicate the risk-benefit ratio for UVB and for PUVA to patients. Counsel patients about phototherapy and PUVA and obtain their informed consent for these treatments.	mini-CEX, CbD, PS	1,3
Select appropriate treatment regimens	mini-CEX, CbD	1, 2
Identify patients failing to respond to treatment, reasons for this and management options	mini-CEX, CbD	1, 2
Evaluate the efficacy of UV therapies and be able to apply suitable discharge criteria	mini-CEX, CbD	1
Diagnose and manage adverse events precipitated by phototherapies.	mini-CEX, CbD	1
Behaviours		
Contributes to multidisciplinary team including phototherapy nurses, medical physics and doctors	CbD, MSF	3
Recognise importance of NICE, BAD and BPG guidelines for phototherapies	CbD	1,2
Recognises limits of different forms of therapy	CbD	1

Teaching and Learning Methods

Independent study

Observation and supervised performance in consultant led dedicated phototherapy outpatient clinic, ideally in both specialist centres and local units, for long enough to gain experience in all common and the majority of rare disorders treated with different therapies

Supervised performance in outpatient treatment centre, both regular planned sessions and ad hoc reviews of patients in difficulty

Observation and work with nursing and phototherapy staff in delivery of phototherapy and photochemotherapy

Suitable external course

Methods agreed by Educational Supervisor and Trainee

6c. Photodynamic Therapy

The trainee will be able to select appropriate patients and lesions for photodynamic therapy (PDT). The trainee will be able to deliver and supervise a basic PDT service for patients with low risk lesions/conditions, and to refer patients appropriately to specialist PDT services.

Knowledge	Assessment Methods	GMP
Define the photodynamic reaction and principles of PDT	SCE, CbD	1
Describe the mechanisms underlying PDT effects on tissue, direct and indirect	SCE, CbD	1

Describe advantages and disadvantages of PDT versus other treatment modalities	SCE, CbD	1
State indications and contraindications for PDT	SCE, CbD	1, 2
State response rates and recurrence rates of PDT indications	SCE, CbD	1, 2
State adverse effects of PDT	SCE, CbD	1, 2
Describe available (pro)drugs and light sources	SCE, CbD	1
Explain how to set up a new service	SCE, CbD	1, 2
Discuss new developments in PDT	SCE, CbD	1
Define robust clinical governance system for PDT service that include accurate adverse event data expressed as a rate	SCE, CbD	1, 2
Skills		
Select appropriate PDT treatment regimen	mini-CEX, CbD	1, 3
Assess, counsel and obtain informed consent from patients prior to PDT treatment	mini-CEX, CbD, PS	1, 2, 3
Demonstrate application of PDT and instruction of patients during the procedure.	DOPS, mini-CEX, CbD, PS	1, 2, 3
Counsel patient in PDT after-care	mini-CEX, CbD, PS,	1, 3
Diagnose and manage adverse events precipitated by PDT.	mini-CEX, CbD	1
Identify patients failing to respond to treatment, reasons for this and management options	mini-CEX, CbD	1, 2
Behaviour		
Contribute to multidisciplinary team including nursing, physics and medical personnel	CbD, MSF	3
Recognise importance of NICE, BAD and BPG guidelines for PDT	CbD, MSF	1,2
Recognise limits of therapy	CbD, MSF	1
Teaching and Learning Methods		
Independent study		
Observation and supervised performance in consultant led PDT clinics.		
Supervised performance of PDT application to patients		
Suitable external course.		
Methods agreed by Educational Supervisor and Trainee		

Appendix 2

The JRCPTB considers the continued development of core skills acquired for CCT important. Each fellowship framework will be expected to contain core components e.g. Professional Skills, Education of Self and Others, Leadership, Management and Research. It is suggested that, in addition to Professional Skills and Management, there is an emphasis on at least one of Education, Leadership or Research, or a combination to enable a balanced portfolio.

JRCPTB Post-CCT Fellowships Educational Standards Framework – Core Components

Potential learning outcomes, which may be viewed as indicative and exemplary, have been outlined for each of the identified core components. It is expected that each fellow will approach these according to their learning needs and will articulate their increased knowledge and skills within their portfolio in different ways.

PROFESSIONAL SKILLS

Fellows will be expected to demonstrate that they have continued to develop those professional skills needed by all doctors, as outlined by the General Medical Council's *Good Medical Practice*,

http://www.gmc-uk.org/static/documents/content/GMP_2013.pdf_51447599.pdf, including:

- Knowledge skills and performance
- Safety and quality
- Communication, partnership and teamwork
- Maintaining trust

LEADERSHIP

Fellows will be expected to demonstrate that they have negotiated learning experiences to improve their effectiveness in leadership and have further developed their skills, knowledge and behaviour to:

- manage and develop self and personal qualities
- work with others, develop and maintain relationships, build teams and enable successful outcomes
- recognise and address poor performance
- develop networks outside/complementary to medicine
- manage and use resources effectively
- facilitate change
- plan appropriately and achieve results to improve health care services, patient safety
- set direction and communicate the vision.

(examples of relevant additional information are available within the NHS Leadership Academy's Leadership Framework).

MANAGEMENT
Fellows will be expected to demonstrate that they have negotiated learning experiences to improve their effectiveness in management and have further developed their skills, knowledge and behaviour to:

 develop and expand awareness of self and others in the context of a constantly changing NHS and health care system
 understand the pressures on and changes occurring in the NHS and health care system
 understand the allocation of resources and financial governance in the NHS
 understand the interdependency of personal, organisational and NHS goals
 develop the ability to contribute effectively to strategic planning and deliver effective operational management to achieve strategic goals
 develop effective operational management skills according to organisational guidance/policy (eg appraisal, interview and selection, disciplinary processes, complaints, clinical governance for the organisation)
 develop skills to manage quality planning, quality control, quality assurance and quality improvement
 recognise and address poor performance
 develop personal skills:

o Team working
o Motivating
o Influencing
o Negotiating
o Delegating
o Managing time (self and others)

EDUCATION OF SELF AND OTHERS
Fellows will be expected to demonstrate that they have negotiated learning experiences to improve their effectiveness in an education role and have further developed their skills, knowledge and behaviour to:

 develop educational understanding within the context of a health care environment (undergraduate, postgraduate and CPD)
 broaden experience of teaching and understanding of work-based learning
o Locally
o Regionally
o University (undergraduate and postgraduate medicine)

 develop links with other organisations, including:
o Deaneries
o GMC
o University (undergraduate and postgraduate medicine)

 develop self-awareness to understand own learning needs and implement strategies and mechanisms to address these, including active participation in:
o CPD
o Appraisal
o Revalidation

 acquire skills needed to increase awareness of the role that management of learning can have within the health care setting and develop the ability to apply the learning theory to the

clinical context, in line with the General Medical Council's *Standards for Curricula and Assessment Systems*
http://www.gmc-uk.org/Standards_for_curricula_and_assessment_systems_0410.pdf_48904896.pdf
 acquire skills needed to enable successful recruitment, interview and selection of medical staff

RESEARCH
Fellows will be expected to demonstrate that they have negotiated learning experiences to improve their effectiveness in a research practice and evaluation role and have further developed their knowledge, skills and behaviour to:
 actively participate in online and local opportunities to meet and learn from established researchers

 develop skills in research methodology

 develop critical appraisal skills

 develop statistical analysis skills

 develop knowledge of responsibilities associated with conduct of research, including:

o maintaining patient safety;
o research ethics and application;
o ensuring quality of data;
o ensuring regulatory compliance;
o time management;
o funding opportunities and budget compliance

 work with local Research and Innovation (R and I) staff

 find and gain agreement from an appropriate established researcher to act as a research mentor

develop skills in presentation and publication of research findings

 develop awareness of research funding opportunities

Appendix 3

JRCPTB Educational Standards Framework for POST-CCT FELLOWSHIPS

1 Entry criteria

 Certificate of Completion of Training (CCT) or equivalent.

2 Duration

 One year minimum (WTE). This may be extended to two years maximum depending upon the educational objectives of the Fellowship, requirements of the Fellow and in negotiation with the employer. The JRCPTB will not accredit a Fellowship which extends beyond two years.

3 Selection

 Candidates will undergo the normal NHS Trust selection process and will be interviewed by a Trust-based panel in compliance with standard NHS and College guidelines.
 The JRCPTB may require an appropriate representative to take part in the selection process.
 Other clinical service providers offering JRCPTB approved post-CCT Fellowships will be expected to undertake an equivalent selection and recruitment practice.

4 Trust responsibilities

 To allocate and confirm the role of a suitable consultant within the department to act as a named Educational Guide with responsibility as follows:
o to ensure that the post-CCT Fellow gains appropriate clinical experience commensurate with the objectives of the Fellowship;
o to provide clinical guidance (supervision) as appropriate to the level and experience of the post-CCT Fellow;
o to ensure that protected time is set aside (normally 1 hour per week) to enable the Fellow and the named educational guide to review cases, discuss progress and issues;
o to ensure that there is suitable mentorship with appropriate experience to reflect the core skill emphasis of the Fellowship (see point 8);
o to provide annual assessment of the Fellow by review of progress and/or log book, assessments CPD, etc;
o to ensure that an appropriate written record is maintained to enable continuity of guidance and feedback to the Fellow as appropriate.

 To provide annual appraisal in line with the General Medical Council's (GMC) *Good Medical Practice* framework and according to JRCPTB's guidelines for specific components of the appraisal process.
 To provide a negotiated job plan that allows the Fellow to gain appropriate experience.
 To consider giving the Fellow the opportunity Be on the Consultant on-call rota (or other appropriate on-call experience relevant to the seniority and scope of the role).

5 Fellow's responsibility

 To work with the Educational Guide to develop and demonstrate attainment of the appropriate skills/knowledge/attitudes sought from the Fellowship and in line with the GMC's *Good Medical Practice* within the timeframe of the Fellowship.

 To provide satisfactory evidence to the JRCPTB of the Fellow's progress (and, if necessary, to provide evidence to the GMC in the event of the introduction of credentialing).

6 Responsibility of JRCPTB

 To oversee the approval of the Fellowship.
 To seek evidence and assess on an annual basis the appropriateness of the Fellowship (this will include feedback from the Fellow and Educational Guide).
 To supervise and oversee the individual Fellow's performance (The JRCPTB will require a letter from the NHS Trust (or other clinical service provider) to confirm that the Fellow has met the objectives of the Fellowship, as approved by the JRCPTB).

7 Suggested timetable

The outline timetable for the Fellow will require approval by the relevant Specialist Advisory Committee (SAC) as part of the approval process for the Fellowship. The timetable will normally consist of:
 A combination of inpatient and outpatient experience, specialist clinics and interventional lists to enable appropriate experience to be gained by the Fellow (this need not take place in the principal employing NHS Trust if appropriate clinical experience is available elsewhere but must be agreed by the both the employer and the other provider and documented formally).
 A total of no more than eight clinical sessions per week, adjusted pro-rata for less than full time Fellows, but no fewer than four clinical sessions.

 Two sessions free from clinical service commitments to enable the Fellow to organise appropriate educational activities for themselves (this need not take place in the principal employing NHS Trust if appropriate educational experience is available elsewhere but must be agreed by both the employer and the other provider and documented formally).
 On-call activity (or other appropriate on-call experience) could be added to the core outline timetable.

8 Educational content

Every Fellow will be looking to develop in their own way with different learning needs. However the JRCPTB considers the continued development of core skills acquired for CCT is important. The SAC will advise on the more specific content for the specialist part of the Fellowship.

Each Fellowship framework will be expected to contain core components e.g. Professional Skills, Education of self and others, Leadership, Management and Research. It is suggested that there is an emphasis on at least one of Education, Leadership and Research, or a combination to enable a balanced portfolio.

9 Review

The Educational Guide and Fellow are expected to take part in an ongoing review process as part of their regular meetings (normally once a week). This is a two way process and should enable the Fellow to receive feedback on progress as well as providing an opportunity to put forward proposals for their ongoing learning and development to enable them to meet the Fellowship framework objectives and their learning needs.

More formal review will take place through the appraisal process (see point 4).

10 Quality assurance

The GMC started a review of Quality Assurance in 2012 which will conclude towards the end of 2013. The conclusions from the review may influence the quality assurance of JRCPTB accredited post-CCT Fellowships. In the meantime, the relevant SAC will have a crucial role in ensuring quality assurance.

The JRCPTB will provide guidelines for mechanisms for quality assurance which are likely to include an annual assessment of progress of both the employing NHS Trust (or other clinical service provider) and Fellow using the Fellow's educational portfolio, logbooks and department Audits/accreditation, together with feedback from Fellow and Educational Guide.

Appendix 4

JRCPTB Post-CCT Fellowships Guidelines – Educational Guide

As a component of the JRCPTB post-CCT Fellowship, each clinical service provider applying for approval to offer a JRCPTB post-CCT Fellowship is required to allocate and confirm the role of a suitable consultant within the leading department for the post-CCT Fellowship post to act as a named Educational Guide.

An Educational Guide is a nominated consultant who has accepted the role as the individual responsible for supporting, guiding and monitoring the progress of a named post-CCT Fellow for a specified period of time. Every post-CCT Fellow should have a named Educational Guide and the Fellow should be informed of the name of their Educational Guide in writing. In advance of the post-CCT Fellow taking up their post the Educational Guide should ensure that they are adequately prepared for the role to:

- ensure safe and effective patient care throughout the Fellowship
- establish and maintain an environment for learning
- teach and facilitate learning
- enhance learning through assessment
- support and monitor educational progress
- guide personal and professional development
- continue own professional development as an educator.

The Educational Guide should have completed training in line with the General Medical Council's *Recognition and approval of trainers* http://www.gmc-uk.org/education/10264.asp. In addition, the Educational Guide should be familiar with the scope and objectives of the post-CCT Fellowship post and the JRCPTB educational standards framework and should ensure that they have sufficient identified time agreed within their job plan to carry out the role effectively.

In some cases, a post-CCT Fellowship post may cross more than one department. However, the clinical service provider should ensure that the Educational Guide who is appointed has responsibility for liaising with the fellow's key clinical supervisors and for coordinating the feedback, support and guidance for the post-CCT Fellow.

2. **Role and responsibilities of the Educational Guide**

Role purpose
The Educational Guide is required to oversee the learning experience, performance and progress of the post-CCT Fellow and provide guidance to enable the Fellow to gain and/or enhance their skills, knowledge and attitudes to fulfil the objectives of the Fellowship and meet the clinical service need.

Main duties and responsibilities
- to ensure that the post-CCT Fellow gains appropriate clinical experience commensurate with the objectives of the Fellowship;
- to provide clinical guidance (supervision) as appropriate to the level and experience of the post-CCT Fellow;

 to ensure that protected time is set aside (normally 1 hour per week) to enable the Fellow and the named Educational Guide to review cases, discuss progress and issues;

 to ensure that there is suitable mentorship with appropriate experience to reflect the core skill emphasis of the Fellowship;

 to provide annual assessment of the Fellow by review of progress and/or log book, assessment, CPD, etc;

 to ensure that an appropriate written record is maintained to enable continuity of guidance and feedback to the Fellow as appropriate.

3. **Supporting and guiding the post-CCT Fellow**

The responsibility of the post-CCT Fellow is:
 to work with the Educational Guide to develop and demonstrate attainment of the appropriate skills/knowledge/attitudes sought from the Fellowship and in line with the GMC's *Good Medical Practice* within the timeframe of the Fellowship.

 to provide satisfactory evidence to the JRCPTB of the Fellow's progress (and, if necessary, to provide evidence to the GMC in the event of the introduction of credentialing).

It is suggested that the Educational Guide adopts the following practice to facilitate achievement of the objectives for JRCPTB post-CCT Fellowships:

Ensuring safe and effective patient care throughout the Fellowship
o To ensure that the Fellow has appropriate departmental/team(s) induction;

o To act to ensure the health, wellbeing and safety of patients at all times;

o To involve Fellows in service improvement;

o To use educational interventions to improve patient care;

Establishing and maintaining an environment for learning
o Be proactive in encouraging the Fellow to share their views on their experience;

o To establish a learning community within their department and/or in relevant areas of the organisation;

o To monitor, evaluate and take steps to address areas for improvement in the Fellow's education and learning;

o To ensure that the Fellow is exposed to appropriately skilled teachers and supervisors;
o To ensure that the Fellow's workload requirements meet the criteria for the Educational Standards Framework and do not compromise any legal/regulatory requirement.

Teaching and facilitating learning
o To demonstrate exemplary subject knowledge and skills;

o To help the Fellow to further develop their self-directed learning;

o To provide effective conversation skill to encourage reflective learning;

o To understand and be able to apply educational frameworks to the Fellow's personal needs;

o To ensure that the Fellow is able to make contributions to clinical practice commensurate with the graduated level of their performance and competence;

Enhancing learning through assessment
o To plan and/or monitor assessment opportunities to support the development of the Fellow and to meet the level and standard expected from attainment of a JRCPTB accredited post-CCT fellowship;

o To understand and apply assessment frameworks which are relevant to assessment of the Fellow's skills, knowledge and attitude and complement the normal revalidation process as outlined in the GMC's *The good medical practice framework for appraisal and revalidation*

(http://www.gmc-uk.org/static/documents/content/GMC_Revalidation_A4_Guidance_GMP_Framework_04.pdf). For example:

- 360 degree feedback
- Reflective practice e.g. a word limited exercise
- Provide details of 2 cases that went well and 2 that did not– What did you do about them? What did you learn from the experience?
- What would you want the next person in the Post CCT Fellowship post to do differently?
- What is your personal development plan for next year?
- Log book
- Audit of results/clinical audit

o To provide regular feedback to the fellow that is clear, focussed and aimed at enabling the fellow to improve specific aspects of their performance.

Supporting and monitoring educational progress

o To explore and agree a learning contract with the Fellow at the beginning of the Fellowship;

o To understand the clinical and core component aspects of the Fellowship and how these might be achieved;

o To identify learning and clinical service needs and discuss and gain agreement from the fellow on the objectives Be met;

o To facilitate opportunities for a wide-range of relevant learning opportunities and to support the fellow in accessing these, where appropriate;

o To review and monitor progress through regular, timetabled meetings;

o To ensure that appropriate written records are maintained and shared with the fellow to enable appropriate feedback and guidance and to provide a record of progress throughout the fellowship which enables the fellow to recognise strengths and to address areas of concern;

o To provide guidance for and to monitor the development of the Fellow's portfolio (it is the fellow's overall responsibility to ensure that their portfolio is maintained and developed and that all supporting documentation is included);

o To respond effectively and efficiently to emerging problems with a Fellow's progress, liaising with fellow's clinical supervisors for constructive feedback, as appropriate;

o Be proactive in seeking opportunities for support and guidance for Fellows whose learning needs are outwith the scope and responsibility of the Educational Guide.

Guiding personal and professional development

o To ensure that the Fellow participates in multi-source feedback;

o To provide guidance on the development of a portfolio and the overlap with the appraisal and revalidation process;

o To provide guidance on the wider national context of professional development for doctors;

o To act as a positive role model and to continue to develop own skills and techniques relevant to clinical service and personal and professional development.

Continuing own professional development as an educator

o To participate fully in local appraisal, validation and educational development activities;

o To actively evaluate own practice and act on formal (e.g. appraisal) and other (e.g. views of colleagues, patients, trainees, fellows) feedback received;

o To develop and act on a personal development plan.