BPAIIG training modules

Module 1
Infectious Diseases
Perinatal Infection
Congenital infections
Neonatal sepsis
Viral Exanthems
PUO
Respiratory infections, e.g. pneumonia, empyema
CNS infections, e.g. meningo-encephalitis, brain abscess
Bone/joint infections
Cardiovascular inf., e.g. infective endocarditis/myocarditis/pericarditis

Module 2
Immunology
Development of immunity- innate & specific
Host resistance – age related infections
Immunologic responses to infection
Immune deficiency – molecular basis, clinical syndromes, investigations incl. molecular genetic testing
Neutrophil and lymphocyte disorders
Management – e.g., Ig replacement, BMT, gene therapy
Complications in immunocompromised – e.g. lymphoproliferative, malignancy, autoimmune
ESID registry, accreditation
Role of Next Generation Sequencing (100KGP)
(combined adult and paediatric trainees)

Module 3
Introduction/update to general allergy:
Atopy –genetic/environmental factors in development
Mechanisms of allergic sensitivities & tolerance
Food allergy
Skin prick testing/RAST
Challenges
Allergy relevant to PID (more focus):
Urticaria/angioedema
Drug allergy
Monoclonals
Vaccine reactions
Desensitisation

Module 4
Epidemiology & Tropical diseases
Burden of childhood infections in the UK, and worldwide
Surveillance methods, notifications (law)
Outbreak control, contact tracing
Immunisation –new developments, world issues (e.g. polio)
Travel advice for prevention
Emerging infections
Imported infections
Malaria/typhoid/parasitic infections
Refugee health
Module 5

**Immunology**

Autoimmunity
Imunodysregulatory syndromes, e.g. IPEX, HIGE
Auto-inflammatory disorders, e.g. HLH, Periodic Fever Syndromes
Immunisation - mechanism of action, immunisation in immunocompromised, revaccination post HSCT
Immune deficiency, e.g. Oncology/ICU/steroids (not HIV)
Infections in the immunocompromised child.

Module 6

**Microbiology**

Microbial classification
Sample collection
Microbiological characteristics (bacteria, fungi, protozoa) – culture methods
Virulence factors
Antimicrobial resistance, MIC’s
Viral identification – EM, culture
Non-culture diagnostic tests – Serological, Molecular including PCR
Infection control (MRSA, hazards) in hospital/community

Module 7

**Infectious Diseases**

Fever
Pathogenesis of infection and injury – bacterial/viral/fungal/protozoa/helminth
Toxin mediated diseases
Sepsis syndrome/shock
Devis/prosthetic materials, e.g. CLABSI
Tuberculous/non-tuberculous mycobacterial infections
GU infections, including STD’s
Hepatitis

Module 8

**Therapeutics**

Anti infectives - pharmacokinetics, action, uses (Rx/prophylaxis), hospital policies, resistance, interactions/ side effects
Antivirals
Antifungals
Immune modulating agents, IVIG
Antimicrobial stewardship/OPAT