

THE HONG KONG COLLEGE OF PAEDIATRICIANS
(Incorporated in Hong Kong with Limited Liabilities)

Committee for Subspecialty Boards

Application for the Accreditation of the Subspecialty of Paediatric Inherited Metabolic Medicine.

1. Declaration :

1.1 We, the undersigned, would like to apply for accreditation of the subspecialty of Paediatric Inherited Metabolic Medicine, this being a new and different from existing subspecialties.

1.2 We submit that the subspecialty is needed in Hong Kong.

Proposed manpower estimate :

- (i) 5 (number) of Fellows could be qualified as First Fellow
- (ii) 3 (number) of (peer-recognized) subspecialists existed.
- (iii) 10 (number) of subspecialists projected as required locally in the next 10 years.

1.3 This subspecialty also exists in other countries such as United Kingdom (country A) Australia (country B).

- (i) 14 / 7 specialists are required in London / Manchester, United Kingdom (country A) (i.e. 1 per 127978 to 210959 paediatric population; and 4 specialists in New South Wales, Australia (country B) ie 1 in 244305 paediatric population)

2. Justification for establishment of subspecialty :

We have also submitted a descriptive narrative, stating that our subspecialty satisfies all the Criteria laid down by the Academy of Medicine for the recognition of a Subspecialty (Appendix I).

- (i) the subspecialty is needed in Hong Kong
- (ii) the subspecialty is new and different from existing subspecialties
- (iii) the knowledge, skills and practice required by that subspecialty are identifiably distinct and are deemed appropriate and compatible with the practice of paediatrics
- (iv) the subspecialty exists in other countries
- (v) the subspecialty is recognized at the institutional level; with the appointment of academic staff for that subspecialty at the Associate Professor level in a university in Hong Kong or the appointment of a Consultant for that subspecialty in one of the Hospital Authority Hospitals or the Department of Health
- (vi) the subspecialty has the administrative support of one or more constituent Colleges of the Academy.

Please also include justification for the subspecialty to be recognized and that the subspecialty has enough members, activities, a training programme ready for accreditation

and unanimous agreement of the programme by all Fellows interested in the subspecialty.

3. Proposed training programme :

3.1 We propose the training programme would be 3 years with 36 months of full clinical activities.

3.2 1(number) proposed training programme within the territory of HK would be adequate at any one time.

3.3 We provide local statistics for our subspecialty :

a. Estimated patient load in Hong Kong:

i. Inpatients - new cases/month (underestimated due to possible presence of cases in other paediatric units, current stocktaking involves centres with a metabolic / neurometabolic clinic: HKCH, QEH, PMH, PWH and QMH) :

- <5
- 6-10
- 10-15
- 16-20
- 21-25
- 26-30
- >30

ii. Outpatient attendance- new cases/month

- <5
- 6-10
- 10-15
- 16-20
- 21-25
- 26-30
- >30

iii. Outpatient attendance- old cases/month

- < 20
- 21-40
- 41-60
- 61-80
- 81-100
- > 100

iv. Estimated number of cases in general population:

1250 per 1 million

b. Local facilities:

i. Designated inpatient bed numbers (N/A if not applicable):

Metabolic / Neurometabolic beds in a 20-bedded Mixed Specialty Ward + 17- bedded Day-centre in HKCH	(please specify number)
	(please specify type: eg neonatology, haematology- oncology, renal, PICU, etc)

ii. Designated outpatient attendance per month

~37-47	(please specify number of new cases)
~180-200	(please specify number of old cases)
~24-26	(please specify frequency of out patient clinics)

iii. Details of facilities relevant to the subspecialty (eg diagnostic laboratories, electrophysiology laboratories, imaging facilities):
(please specify number and type of facilities)

Type of facilities	Number
Laboratories (Haematology, Chemical Pathology, Histopathology, Genetic/Genomics)	In various hospitals under HA
Newborn screening for inborn errors of metabolism	HKCH
Neurophysiology laboratories (NCV, EMG, EEG, BAEP, SSEP)	In various hospitals under HA
Radiology (CT, MRI, Ultrasound, Nuclear medicine)	In various hospitals under HA
Pharmacy (24-hour support e.g. total parenteral nutrition)	In various hospitals under HA
Allied health professionals (Clinical psychology, Dietetic, Medical social work, Physiotherapy, Occupational therapy, Speech therapy,	In various hospitals under HA

Prosthetics & Orthotics etc)	
Red Cross School	In various hospitals under HA

iv. Details of facilities might need to be given – subspecialty specific:
(e.g. Neonatology: ventilator bed, paediatric surgery etc) (please specify)

Type of facilities	Number
PNICU	In various hospitals under HA
Other paediatric subspecialties (Cardiology, Dermatology, Developmental Behavioural Paediatrics, Endocrinology, Gastroenterology, Haematology / Transplant, Neurology, Nephrology, Palliative care, Rheumatology/Immunology, Respiratory medicine etc)	
Surgical stream specialties (Dental, ENT, Neurosurgery, Ophthalmology, Orthopaedics, Surgery etc)	
Psychiatry	
Anaesthesiology and Perioperative Medicine	
Clinical genetic service	HKCH

c. Resources

v. The development of this subspecialty requires extra resources
 Yes No

If yes the extra resources include:

1. Manpower
 Yes No
2. Equipment
 Yes No
3. Space for use by subspecialty
 - i) Bed space
 Yes No
 - ii) Laboratory space
 Yes No

iii) Rehabilitation space

Yes No

iv) Others:

Yes No

If yes, please specify:

d. Manpower

i)	Number of subspecialists needed in Hong Kong	<u>10</u>
ii)	Number of peer-recognized subspecialists currently practicing in Hong Kong:	<u>8</u>
iii)	Number of Paediatricians currently practicing this subspecialty	<u>8</u>
iv)	Number of trainees that need to be trained to meet the current need	<u>5</u>
v)	Number of qualified trainers currently available	<u>5</u>
vi)	Number of trainees that can be accommodated with the existing provision of manpower and facilities	<u>2-3</u>
vii)	Number of trainees currently under training in this subspecialty	<u>0</u>

3.4 Career structure

Based on the analysis of the above information, we deduce the following:

- | | |
|--|---|
| 1. Number of fully-trained subspecialists in (e.g. neonatology) required for whole of Hong Kong | <u>10</u> |
| 2. Number of subspecialists trainees required to be trained after their FHKAM (Paediatrics) Fellowship Exit Examination in order to maintain a steady state in the next 10 years (i.e. all fully-trained subspecialists can function full-time in that subspecialty and the “a” can be reached just right), taking into account of retirement and projection of needs in the next 10 years, etc. | <u>8-10</u> |
| 3. Number of fellows (FHKAM Paediatrics) required to be working with the subspecialists to reach a desirable level of service and training for the whole of Hong Kong. | <u>11-22 (1-2 from each hospital with paed in-patients)</u> |
| 4. Number of trainees (pre-fellows) required to be working in the subspecialty to reach a desirable level of service and training for the whole of Hong Kong. | <u>1-2 FTE (rotational basis to involve more interested trainees as possible)</u> |
| 5. Number of centres or clustered network required for this subspecialty in the whole of Hong Kong. | <u>1-2</u> |

3.5 We also submit additional information on the justification of establishment of our subspecialty, with reference to :

3.51 Curriculum:

a) Duration of subspecialty training

- 2 years post-higher training in general paediatrics
- 3 years (incorporating 1 year of training in that particular subspecialty during the higher training in general paediatrics and 2 years of extra subspecialty training)

b) Maximum duration (**3 months**) of recognition for specified qualification or training within the subspecialty training programme

	Yes	No
i) Ph. D	✓	<input type="checkbox"/>
ii) M. Phil.	✓	<input type="checkbox"/>
iii) M. Med. Sc.	✓	<input type="checkbox"/>
iv) Others	✓	<input type="checkbox"/>

Please specify _____ Accredited subspecialist relevant to core module 2-4 and/or postgraduate degree relevant to PIMM could be recognized subject to decision from PIMM Subspecialty Board

c) Clinical experience

i) Minimum

- 24 months
- 30 months
- ✓ 33 months

ii) Maximum

- 24 months
- 30 months
- 36 months

iii) Minimum number of new out-patient consultation in that subspecialty during the whole period of subspecialty training

- ✓ 50-100
- 100-150
- 150-200
- 200-300
- Others

Please specify _____

iv) Minimum number of old out-patient consultation in that subspecialty during the whole period of subspecialty training

- ✓ 300-400
- 400-500
- 500-600

- 600-700
- 700-800
- Others

Please specify _____

v) Minimum number of subspecialty clinics per week

- 2
- 3
- 4

vi) Necessity of log sheet or log book

- Yes
- No

vii) Availability of checklist for minimum number of special procedures for that subspecialty

- Yes*
- No

*** (please submit a separate check list on all special procedures required for the subspecialty – Appendix II)**

d) Research activities required

- Yes
- No

If yes,

(i) Clinical research programme

- Yes
- No

(ii) Basic research programme (eg. laboratory experience)

- Yes
- No

If yes, please specify minimum duration

- 6 months
- 12 months

Please also specify maximum duration allowed

- 6 months
- 12 months

e) Teaching required

- Yes
- No

If yes, please specify minimum percentage of time

- <5%
- 10%
- 15%
- Others

Please specify _____

Please also specify maximum percentage allowed

- 10%
- 15%

- 20%
- Others

Please specify _____

- i) Undergraduate
 - Yes No
- ii) Postgraduate
 - Yes No

f) Administration within subspecialty (eg medical audit, involvement of service development, co-ordination & administration within subspecialty)

- Yes No

If yes, please specify minimum percentage of time

- <5%
- 10%
- 15%
- Others

Please specify _____

Please also specify maximum percentage allowed

- 10%
- 15%
- 20%
- Others

Please specify _____

g) Subspecialty training is done in

more than two units: Paed & Adolescent Medicine, HKCH/QEH; Accredited training centre(s) for Paediatric Neurology; Genetic / Genomic (Paediatrics); HA Pathology Units with chemical pathology labs with accredited services related to PIMM; Research laboratory on PIMM in both Universities; overseas expert centres in PIMM

h) Overseas training required

- Yes No

If yes, what is the minimum duration?

- 3mths
- 6mths
- 12mths
- others:

Please specify _____

If yes, please also describe

- (i) setting _____
- (ii) objectives _____

i) Pre-set curriculum for their elective period

Yes No

3.52 Assessment of training :

a) Profolio assessment

✓ Yes No

If yes, please describe

- (i) Oral ✓ Yes No
(ii) Written ✓ Yes No
(iii) Course work Yes ✓ No
(iv) Postgraduate Degree or Certificate Yes ✓ No
(v) Published papers ✓ Yes No

3.6 Institution/Functional Training Unit

3.61 Please describe the statistics for EACH Programme:

				Comments
1. Case load per year	(new) 80	(old) 1000		
2. Case profile	* Highly Complex	63	%	
	* Complex	32	%	
	* Intermediate	5	%	
	* Simple	0	%	
a) No. of specialists working in the programme	2-3 (Paediatric Resident Specialists)			
b) _____ % of time working in the subspecialty	51-100%			
3. No. of sub-specialists (FTE) (FTE = at least 35-50% of time working in the sub-specialty)	5			Not single handed, best 3-5 subspecialists for cover
4. Having a structure for centre e.g. Director on service, training or research etc	✓ Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
5. No. of trainees	Maximum 2-3 at a time			
6. No. of supporting staff (Please specify)	e.g. Dietitian	1		* as part of the manpower within respective team / department
	Scientific officer	*		
	Therapists	*		
	Research fellows/assistants	0		

7. Structured training programme	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
8. Clinical guidelines/protocols	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
9. Clinical audit	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
10. Research projects	<input checked="" type="checkbox"/> Yes			

*** Please define clearly each category for your subspecialty, citing clinical examples and the case mix necessary for a viable programme – Appendix III**

3.7 Supportive Service considered as mandatory to the programme :

								Comments
1. Coordination with other relevant paediatric subspecialties (please specify)								
	Yes	No	NA	emergency	elective	On site	Other location	
e.g. PICU/NICU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Medical subspecialties	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Surgical subspecialties	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Orthopaedic subspecialties	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Oncology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Transplant	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Liver transplant in QMH
Others (please specify)								
2. Special investigatory support								
a. Laboratory								
	Yes	No	NA	emergency	elective	On site	Other location	
Chemical pathology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Histo-pathology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Special arrangement outside office hour maybe possible on case by case basis
Cytogenetics	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
IEM lab	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Haematology	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

Microbiology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Immunology	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Others (please specify)								
b. Radiology								
US	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
MRI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Isotope Scan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	QEH
Others (please specify)								
3. Special therapeutic support								
Radiotherapy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Interventional radiology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Chemotherapy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Pharmacy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Total parental nutrition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Nutritionist	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Clinical psychologist	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Medical Social workers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Off site phone support
Allied health	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Others (please specify)								
4. Special management modalities (eg Parents support groups) (Please specify)								

3.8 Proposed requirement of Trainers

a) Number of training staff in a centre recommended (for full accredited training of minimal 24 months of Module 1 of PMM syllabus:

- 1
 1-3
 3-4
 >4

Please specify _____

b) In possession of the necessary skills in laboratory, special procedure or basic sciences practice

- Yes No

c) Active in carrying out clinical audit and setting up of management guidelines

Yes No

3.9 Proposed educational activities:

	<u>Location</u>	<u>Frequency</u>
Grand round	HKCH / QEH	Monthly from various (sub)specialties, ~Yearly from PMM team
Journal Club	HKCH / QEH	Monthly from various (sub)specialties, ~Yearly from PMM team
X-ray/imaging meeting	HKCH / QEH	Monthly
Audit	HKCH / QEH	Yearly
* other CME Activities	Research Meeting in HKCH / QEH	Monthly from various (sub)specialties, ~Yearly from PMM team

*** (please note that CME activities will be required for recognized subspecialties)**

3.10 The field of research available in our subspecialty and existing in HK (please describe in details) :

- (i) Clinical
 - Use of multi-omics analyses in undiagnosed inherited metabolic disorders (IMD)
 - Various projects generated from data from newborn screening for IMD
 - Attitudes from parents / healthcare professionals on dried blood spot cards in newborn screening for IMD
 - Use of hydroxytyrosol in mitochondrial diseases patients
 - International Neurotransmitter Diseases Registry
- (ii) Laboratory
 - Biomarkers in diagnosing / monitoring (IMD)
 - Drug screening to treat mitochondrial diseases using patients' fibroblasts

(iii) Epidemiological

- Mitochondrial disease registry in Hong Kong

3.11 2 (Number) of candidates are potential programme director(s) for HK (> 50% of time spent on subspecialty)

3.12 5 (Number) of candidates are potential trainers of the programme

3.13 We submit in details the curriculum of our subspecialty training programme under the headings of knowledge, skills and attitudes as Appendix III (on describing the training programme, please take reference from the handbook of Guideline on Postgraduate Training & Accreditation published by the College).

4. We have obtained the supporting letters from two external referees as required for our programme:

(a) Prof. Shamima Rahman of Great Ormond Street Institute of Child Health (Institution) in UK (country) and

(b) Prof. Stefan Kolker of University of Heidelberg (Institution) in Germany (country)

On behalf of the core groups of paediatric metabolic medicine subspecialty

Co-ordinators of the subspecialty:

Hospital / Name	Title	Signature	Date
Hong Kong Children's Hospital			
Dr Fung Cheuk Wing	Consultant		
Dr Kiran Belaramani	Associate Consultant		
Dr Kwok Mei Kwun Anne	Associate Consultant		
Dr Wong Suet Na Sheila	Associate Consultant		
Prince of Wales Hospital			
Dr Chong Shuk Ching Josephine	Clinical professional consultant		
Princess Margaret Hospital			
Dr Yau Kin Cheong Eric	Consultant		
Queen Elizabeth Hospital			
Dr Chow Chi Kwan Jasmine	Consultant		
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