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

#### Working Group for Paediatric Subspecialty Accreditation

#### Application for the Accreditation of the Subspecialty of Paediatric Immunology and Infectious Diseases

#### 1. Declaration:

- 1.1 We, the undersigned, would like to apply for accreditation of the subspecialty of <u>Paediatric</u> <u>Immunology and Infectious Diseases</u>, this being new and different from existing subspecialties.
- 1.2 We submit that the subspecialty is needed in Hong Kong.

Proposed manpower estimates:

- (i) 11-12 Fellows could be qualified as First Fellow
- (ii) <u>11-12</u> subspecialists existed.
- (iii) <u>26</u> subspecialists projected as required locally in the next 10 years.
- 1.3 This subspecialty also exists in other countries such as <u>United Kingdom</u> (country A) and <u>United States of America</u> (country B).
- (i) <u>31 paediatric</u> specialists are existing in <u>United Kingdom</u> (country A) i.e. <u>3-4</u> in <u>1 million</u> (population of age <18); and <u>≥ 180</u> in the <u>State of California</u>, <u>USA</u> (country B) i.e. <u>5.2</u> in <u>1</u> million (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.	<b>Proposed</b>	training	programme	•
	Lioposeu	CI COLLINIA S	brogramme.	

Proposed training programme :
3.1 We propose the training programme would be <u>3</u> years with <u>a minimum of 30 months</u> of full clinical activities.
3.2 <u>One</u> 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:
□ 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
$\Box$ < 20
$\Box \qquad 21-40$
□ 41-60 □ 61-80
□ 61-80 □ 01-100
□ 81-100
$\sqrt{} > 100$

iv. Estimated number of cases in general population:

> 500 acute hospital	
admissions / consultations	per 1 million per year

- b. Local facilities:
  - i. Designated inpatient bed numbers (N/A if not applicable):

24 beds in HAIDC, PMH (all negative pressure isolation rooms, 2 PICU beds)

(please specify number)
(please specify type: eg neonataology,
haematology-oncology, renal, PICU,
etc)

24-30 beds in QMH [10 negative pressure isolation rooms (8 in general ward and 2 in ICU)]

16 beds in PWH (9 negative pressure isolation rooms)

14 beds in QEH (10 negative pressure 2 ICU)

Variable number of isolation rooms available in most HA hospitals

Bone Marrow Transplantation setup available in 2 university hospitals for patients with primary immunodeficiencies and autoimmune disorders

ii. Designated outpatient attendance per month

16-24 (ID) 60-64 (Immunology)	(please specify number of new cases)
100 (ID)	(please specify number of old cases)
220 (Immunology)	
15 (ID)	(please specify frequency of out
21 (Immunology)	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

Microbiology laboratories

Most HA hospitals

	Virology laboratories	3	
	Immunology laboratories	2	
	Imaging facilities	Most HA h	ospitals
	iv. Details of facilities might need (e.g. Neonatology: ventilator bed, p		
	Type of facilities	Number	
	P/NICU	At least 8 in HA	
	Bone marrow transplant centres	2 (QMH and PW	/H)
	Paediatric surgical centres	3 (QMH, PWH a	and QEH)
c. R	esources		
	v. The development of this subspective $\sqrt{\text{Yes}}$ No	cialty requires extr	a resources
	If yes the extra resources include:  1. Manpower  √ Yes □ No  2. Equipment □ Yes √ No  3. Space for use by subspection in Bed space □ Yes √ No  ii) Laboratory space □ Yes √ No  iii) Rehabilitation space □ Yes √ No  iv) Others: √ Yes □ No  If yes, please specification in the space in the sp	fy:	epidemiology
	support system		
d. N	Ianpower		
i)	Number of subspecialists needed i	n Hong Kong	26
ii)	Number of peer-recognized subsponsericing in Hong Kong	ecialists currently	11-12 (in HA hospitals) At least 2 in

		sector
iii)	Number of Paediatricians currently practicing this subspecialty	At least 12
iv)	Number of trainees that need to be trained to meet the current need	14-15
v)	Number of qualified trainers currently available	11-12
vi)	Number of trainees that can be accommodated with the existing provision of manpower and facilities	3-4
vii)	Number of trainees currently under training in this subspecialty	5

#### 3.4 Career structure

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

1.	Number of fully-trained subspecialists in infectious disease / immunology required for whole of Hong Kong	26
2.	Number of subspecialist 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.	14-15
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.	14-15
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.	Share with general paediatrics
5.	Number of centres or clustered network required for this subspecialty in the whole of Hong Kong.	3-4 training units (1 training programme)

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)

	duration of recognite gramme is 6 months		qualification or training	ng within the subspecialty
i)	Ph. D	Yes √	No	
ii)	M. Phil.	$\sqrt{}$		
iii)	M. Med. Sc.	√		
iv)	Others	$\sqrt{}$		
	Please specify		ate Diploma in Diseases (HKU)	
		-	ediatric Infectious versity of Oxford)	
		Infectious Dise	duate Diploma in ases (University of ndon)	
	_			
c) Clinical exp	erience			
i) Minimum				
	□ 24 months			
	$\sqrt{}$ 30 months			
	□ 36 months			
ii) Maximum				
	□ 24 months			
	□ 30 months			
	$\sqrt{}$ 36 months			
		-patient consultation	on in that subspecialty of	during the whole period of
subspeci	alty training ☐ 50-100			
	1			
	√ 100-150 □ 150-200			
	□ 130-200 □ 200-300			
	Others			
		ease specify		
iv) Minimum	number of old out-	patient consultation	n in that subspecialty d	luring the whole period of
subspeci	alty training			
	300-400			
	400-500			
	500-600			
	□ 600-700			
	700 800			

Others
Please specify
v) Minimum number of subspecialty clinics per week
$\sqrt{1}$ (per training unit)
vi) Necessity of log sheet or log book
□ Yes √ No
vii)Availability of checklist for minimum number of special procedures for that subspecialty
$\Box$ Yes* $\forall$ No (check list not applicable)
d) Research activities required
√ Yes □ No
If yes,
(i) Clinical research programme
√ Yes □ No
(ii) Basic research programme (eg. laboratory experience)
☐ Yes V 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% □ 150/
□ 15%
Others
Please specify  Please specify  Please specify
Please also specify maximum percentage allowed
√ 15%
□ 20%
□ Others
Please specify

i)	Undergraduate
	√ Yes □ No
ii)	ii)Postgraduate
	√ Yes □ No
f) Administratio	n within subspecialty (eg medical audit, involvement of service development,
co-ordination	& administration within subspecialty)
√ Yes □	
If yes, pleas	se 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 t	raining is done in
	two centres
	$$ more than two centres $\underline{OMH}$ $\underline{PMH}$ $\underline{PWH}$ $\underline{OEH}$
h) Overseas train	ing required
√ Yes □	No
, 100	
If ves, what is	the minimum duration?
,,	□ 3mths
	√ 6mths
	12mths
	Others:
	Please specify
	Trease specify
If yes, please a	lso describe
(i) Setting	Tertiary care facilities with a recognized training programme
(ii) Objectives	
(ii) Objectives	, 1
	treatment and prevention of pediatric infectious diseases /
	diagnosis and management of immunologic and allergic disorders
i) Pre-set curricul	um for their elective period
1	No (but preferred options will be advised by Training Director)

3.52 Assessment of training:				
a) Portfolio assessment				
√ Yes □ No				
If yes, please describe				
(i)Oral	$\checkmark$	Yes		No
(ii)Written		Yes		No
(iii) Course work		Yes	$\checkmark$	No
(iv)Postgraduate Degree or Certificate		Yes	$\checkmark$	No

#### Institution / Functional Training Unit 3.6

(v)Published papers

### ${\it 3.61 Please describe the statistics for EACH Programme:}$

				Comments
1. Case load per year	>1000 hospital admissions /			
	in-patient consul			
	900-1000 new ou	ıt-pati	ents	
	3000-4000 old or	it-pat		
2. Case profile – Infectious	* Highly complex	10	%	
Disease	* Complex	10	%	
	* Intermediate	30	%	
	* Simple	50	%	
Case profile – Immunology	* Highly complex	10	%	
	* Complex	20	%	
	* Intermediate	30	%	
	* Simple	40	%	
a) No. of specialists working in	11-12			
the programme				
b) $\geq 50$ % of time working	8			
in the subspecialty				
3. No. of sub-specialists (FTE)	11-12			
(FTE = at least $35-50\%$ of time				
working in the sub-specialty)				
4. Having a structure for centre	√Yes □ No		NA	
e.g. Director on service, training				
or research etc.				
5. No. of trainees	9-12 in 10 years			
6. No. of supporting staff	e.g. Clinical			
(Please specify)	psychologis	t		

No

Yes

	Scientif	ic officer		
	Therapi	sts		
	Researc	h /assistants		
7. Structured training programme	√ Yes	□ No	ΝA	
8. Clinical guidelines/protocols	√ Yes	□No	VΑ	
9. Clinical audit	√ Yes	□No	VΑ	
10. Research projects – No.		1		

\*Highly complex – requires advanced knowledge and considerable experience for optimal management, often rare or uncommon conditions demanding sophisticated diagnostic techniques, complicated treatment regimen and multidisciplinary team approach

eg. Primary immunodeficiency syndromes, HIV / AIDS, bone marrow transplant, infections in stem cell transplant or solid organ transplant recipients, graft-versus-host disease, lymphoproliferative disorders

\*Complex – requires special diagnostic tests and careful therapeutic monitoring, or newly identified conditions with diagnosis and treatment under development

eg. multi-drug resistant bacterial infections, multi-drug resistant tuberculosis, infective endocarditis, infections in immunocompromised hosts (excluding transplant recipients), SARS, highly pathogenic avian influenza, systemic lupus erythematosus, mixed connective tissue disorders, allergen desensitization

\*Intermediate – serious or life-threatening systemic or organ-specific disorders, or conditions requiring extensive diagnostic evaluation

eg. tuberculosis, fever of unknown origin, periodic fever syndromes, meningitis, meningoencephalitis, sepsis, congenital infections, empyema, shunt infections, infections due to antibiotic resistant organisms, EV 71 infection, Kawasaki disease, organ-specific autoimmunity, anaphylaxis and anaphylactoid reactions, vaccine reactions, food and drug allergy, Stevens Johnson syndrome

\*Simple – common conditions that are generally managed at secondary level if hospitalization is required, and diagnosis and treatment are straight forward

eg. common respiratory infections, gastroenteritis, urinary tract infections, common childhood exanthemata, allergic rhinitis, atopic dermatitis

## 3.7 Supportive Service considered as mandatory to the programme:

								Comments
1. Coordination				nt paediatric				
subspecialties (1	1	_	T			,		
	Yes	No	NA	Emergency	Elective	On	Other	
						site	Location	
e.g.	√			√				
PICU/NICU								
Medical	$\vee$			√	√	√		
subspecialties								
Surgical	√			√	√		√	
subspecialties	ļ.,							
Orthopaedic	1			$\checkmark$	√	√		
subspecialties								
Oncology	1			√	√		√	
Transplant				√	$\sqrt{}$		$\sqrt{}$	
Others (please s	pecify	)						
2. Special invest	2. Special investigatory support							
a. Laboratory								
	Yes	No	NA	Emergency	Elective	On	Other	
						site	Location	
Chemical	<b>√</b>			$\checkmark$	√	√		
pathology								*
Histo-patholog	$\vee$			$\checkmark$	$\checkmark$			
у								
Microbiology	$\sqrt{}$			$\checkmark$	√	√		
Immunology	$\sqrt{}$			$\checkmark$	$\checkmark$		$\sqrt{}$	
Others (please sp	pecify	)						
b. Radiology								
US	$\sqrt{}$			$\checkmark$	$\checkmark$	$\checkmark$		
CT	$\sqrt{}$			$\sqrt{}$	$\checkmark$	√		
MRI	$\sqrt{}$			$\sqrt{}$	<b>√</b>	$\sqrt{}$		
Isotope Scan	<b>√</b>				$\sqrt{}$		<b>√</b>	
Others (please sp	pecify)	)						
3. Special therap	eutic s	suppo	rt					
Radiotherapy	<b>V</b>				$\sqrt{}$		$\sqrt{}$	
Interventional	<b>√</b>			V	<b>√</b>	<b>√</b>		
radiology								
Chemotherapy	<b>√</b>					<b>√</b>		
Pharmacy	<b>√</b>			<b>√</b>		<b>√</b>		

Total					T .1	1			7
	1				V	\ \ \			
parenteral nutrition									
Nutritionist	<b>√</b>				-1	-1			4
	-				√ /	1			_
Clinical	V				\ \	1 1			
psychologist	1				,	,			_
Medical Social	1				√	\ \ \			
workers	- 1				1				_
Allied health	√				√	√			_
Others (please sp	ecity	<u>')                                    </u>							_
4.0									
4. Special manag				s (eg Parents					
support groups )	(Plea	se spe	cify)						
b) In possession (a) Active in ca	Yes	the ne	cessar√	ecify ry skills in labo No al audit and set					s pract
.9 Proposed edu	icatio	nal ac	tivitie	s:					
				<u>Location</u>		F	requency		
Grand Round			In	terhospital		1	Monthly		
Journal Club		Interhospital			Monthly				
Audit		Interhospital or local			Every 6-12 months		S		
Other CME Activities		Training days			2 days every 2 years		rs		
		Н	ong K	long Society fo	or	The same of the same	fic meetings		
				Immunology			nounced		
				ious Diseases					
		-		raining course					
(eg. Hot Topics of Infection Yearly									
				nity in Childre					
		41.	)C	1 Comme	**				

the Oxford Course)

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

#### (i) Clinical

#### **OMH**

Streptococcal pneumoniae carriage in young children Influenza and febrile seizures

Viral triggers of asthma exacerbation

#### **PMH**

Human swine influenza, avian influenza and SARS – clinical manifestations, complications, diagnosis, treatment and outcome

Measles in young infants

Complications of varicella and EV71 infection in

hospitalized children

Complications of BCG vaccination

#### **PWH**

Food allergy and skin diseases

#### (ii) Laboratory

#### **QMH**

Immune response to microbial infections – HIV and Mycobacterial interactions

Immunopathogenesis of human avian influenza infection

Biology of interferon and cytokines - signaling pathways and gene regulation

Immunogenetics of SLE

Genetic diagnosis of primary immunodeficiency

#### (iii) Epidemiological

#### **PWH**

Epidemiology, genetics and basic mechanisms of asthma and other atopic disorders

#### **PMH**

Epidemiology of measles, chickenpox and human swine influenza in Hong Kong

#### **QMH**

- 1. viral respiratory infections in hospitalized children
- 2.population-based hospitalization disease burden study of common respiratory viruses.
- 3. study on the impact of influenza vaccination on hospitalization disease burden
- 4. study on the impact of pcv-7 on nasal carriage of pneumococcus and staph aureus.

- 5. Primary immunodeficiency China Asia Registry
- 6. Prevalence study of food allergy

(iv)

#### QMH and PMH

Biopharmaceutical research

Vaccine studies (influenza, rotavirus, varicella vaccine) Antiviral treatment for emerging viral infections e.g. SARS

**QMH** 

Platform Technology for investigating Bioactive Molecules

from Natural Products

- 3.11  $\underline{5}$  candidates are potential programme director(s) for HK (  $\geq$  50% of time spent on subspecialty)
- 3.12 <u>12</u> 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 II (on describing the training programme, please take reference from the handbook of Guideline on Postgraduate Training & Accreditation published by the College).

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#### 4. We propose the following as external assessors of our programme:

#### Nigel Klein BSc, MBBS, MRCP, PhD, FRCPCH

Professor of Infectious Diseases and Microbiology
Institute of Child Health, University College London
Honorary Consultant
Great Ormond Street Hospital NHS Trust
United Kingdom

#### Vas Novelli FRACP, FRCP, FRCPCH

Senior Consultant in Paediatric Infectious Diseases Great Ormond Street Hospital NHS Trust Honorary Senior Lecturer Institute of Child Health, University College London United Kingdom

#### David Isaacs, FRACP

Clinical Professor in Paediatric Infectious Diseases

The University of Sydney

Senior Staff Specialist

The Children's Hospital at Westmead

Australia

On behalf of the core group of Paediatric Immunology and Infectious Diseases subspecialty.

### Co-ordinators of the subspecialty:

Julan		er cla
Prof. Lau Yu Lung	Dr. Leung Chi Wai	Dr Chow Chun Bong
Prof. Allan Lau	Dr. Suşan Chiu	Prof. Leung Ting Fan
gank.	M	des
Dr. Ko Po Wan	Dr. Kwan Yat Wah	Dr. Lee Tsz Leung
Mulfa	Thetho	Demonth lan
Dr. Yau Yat Sun	Dr. Marco HK Ho	Dr Desmond Chan
Tralita	~	
Dr Frankie Cheng	Dr Lee Wai Kin	Dr Alson WM Chan
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