

October 2006

THE COLLEGE OF PAEDIATRICIANS OF SOUTH AFRICA

R E G U L A T I O N S

**FOR ADMISSION TO THE EXAMINATION FOR THE
POST-SPECIALISATION**

SUB-SPECIALTY CERTIFICATE

IN

PAEDIATRIC NEUROLOGY

Cert Paediatric Neurology(SA)

1.0 ELIGIBILITY TO TAKE THE EXAMINATION

In order to be eligible to enter for this examination, the candidate:-

- 1.1 Must comply with the requirements for registration as a medical practitioner, as prescribed by the Medical, Dental and Supplementary Health Services Act.
- 1.2 Must be registered as a specialist Paediatrician
- 1.3 Must have completed a minimum of two years post specialisation as a subspecialist trainee in Paediatric Neurology, in an accredited teaching facility/institution, registered and approved with the Health Professions Council of South Africa
- 1.4 Must have completed all the required training course requirements in the subspeciality of Paediatric Neurology
- 1.5 Must submit a written report from the head of the training programme, confirming that the training requirements have been met for registration in the sub speciality of Paediatric Neurology, including, but not limited to skills, knowledge, experience, personal qualities and attitudes

2.0 SYLLABUS AND TRAINING

See Appendix A

3.0 FORMAT AND CONDUCT OF THE EXAMINATION

See Appendix B

4.0 RECOMMENDED READING

See Appendix C

5.0 RECOGNITION OF TRAINING FROM OVERSEAS INSTITUTIONS

See Appendix D

APPENDIX A**2.0 SYLLABUS FOR TRAINING PROGRAMME IN PAEDIATRIC NEUROLOGY IN SOUTH AFRICA**

(As recommended by the Paediatric Neurology and Development Association of Southern Africa (PANDA-SA))

This document details the curriculum set by an ad hoc committee of PANDA-SA (2002/3) as the standard of training required for persons wishing to register as paediatric neurologists

2.1 The overall aims of the training programme

2.1.1 The training programme aims to equip candidates to practise in the subspeciality of Paediatric Neurology. This encompasses the study, assessment and management of a wide spectrum of neurological diseases from the newborn period to adolescence. General consensus accepts that it should include expertise in cerebral palsy, childhood epileptic syndromes, strokes, disorders of the spine, hydrocephalus, neuro-cutaneous disorders, neuromuscular disorders, children with movement disorders, CNS tumours, neuro-degenerative disorders, neuro-metabolic/inborn errors of metabolism disorders, mental retardation, language and communication (autism) disorders, ADHD and learning disorders, headaches, sleep disorders, neuronal migration disorders, disorders of the cerebellum, neuro-psychiatric disorders and complimentary involvement in neurosurgical patients

2.1.2 The paediatric heritage therefore has to be superimposed on psychiatry, psychology, developmental, education, social work, the communication sciences, occupational and physical therapy and many more

2.1.3 Because of the nature of this subspeciality, professionals who work in the field have to develop some unique characteristics. They need to be intellectually eclectic, dealing with gradation rather than absolutes. Their view has to be longitudinal and developmental. They have to deal with nature versus nurture interactions and often have to bridge gaps between science and clinical practice. They have to be committed to multidisciplinary collaboration in problem solving

2.2 Specific outcomes

On completion of training the candidate must be able to manage children with special needs as pertaining to abnormalities of the neurological systems. They should have the skills to act as a resource for other professionals. They must be able to assist in training, research and the development of programmes, whether the focus is prevention, intervention or therapeutic

2.3 Training**2.3.1 Objectives:**

At the end of the training the candidate must be able to pass an examination approved by the HPCSA specialist committee

2.3.2 Knowledge:**2.3.2.1 Basic sciences:**

A sound knowledge and experience in the following fields are essential:

- neuro-anatomy, neuro-embryology of the brain
- neuro-physiology including a good working knowledge of the basics of EEGs and their interpretation as they pertain to children, EMGs and nerve conduction studies, evoked potential studies
- basic biochemistry (neuro-metabolic investigations)
- neuro-radiology including CT brain scans, MRI scans, Spect scans and ultra sound
- selective histopathology including muscle, nerve and neuronal histology
- selective and clinically applied neuro-genetics (recurrence risks, prenatal diagnosis, gene localisation and gene imprinting)
- pharmacology of CNS drugs (eg anti-epileptics)
- basic statistics and research design

2.3.2.2 Clinical training:

- A two-year attachment to a recognised paediatric neurology training unit with exposure to as wide a range of paediatric neurology cases as possible. Exposure to the following cases is essential. Cerebral palsy, childhood epileptic syndromes, strokes, disorders of the spine, hydrocephalus, neuro-cutaneous disorders, neuromuscular disorders, children with movement disorders, CNS tumours, neuro-degenerative disorders, neuro-metabolic/inborn errors of metabolism disorders, mental retardation, language and communication (autism) disorders, ADHD and learning disorders, headaches, sleep disorders, neuronal migration disorders, disorders of the cerebellum, neuro-psychiatric disorders
- Competence in neurological emergencies (coma, status epilepticus, raised intracranial pressure, metabolic disorders, trauma and non-accidental injuries)
- Neonatal neurology with an understanding of the principles of ante-natal brain development, brain injury and its investigations
 - Suitable time spent ... /

- Suitable time spent in adult neurology, either on regular clinical ward rounds, case discussions and attendance at conferences
- Exposure and involvement in research projects, attendance and presentations at relevant conferences
- Suitable time spent in child and adolescent psychiatry (Attendance at clinics)
- **Principles of therapy:**
 - familiarity with physio, occupational and speech therapy
 - thorough knowledge of drugs used in paediatric neurology
 - principles underlying rehabilitation
 - principles of management of behavioural disorders (counselling and psychotherapy, drugs)
 - awareness of range of alternative therapies
 - knowledge of therapy aids (hearing and visual aids, seating mobility [aids, orthoses, communication aids])
 - awareness of neurosurgical procedures and forms of therapy
- **Clinical skills:**
 - developmental assessment
 - an understanding of the common psychometric tests
 - detailed neurological examination
 - interpret results of investigations (EEG, EMG, nerve conduction, evoked potentials, metabolic and biochemical, CT and MRI scans)
 - perform EMG, nerve conduction
 - skin biopsy
 - muscle biopsy
 - raised intracranial pressure monitoring
 - perform tests to determine brain death
 - lumbar punctures
 - subdural punctures
- **Academic:**
 - teaching skills (under/postgraduate, formal and informal skills)
 - communication skills (to parents, children, peers and colleagues)
 - demonstrate adequate knowledge of clinical research methods, biostatistics, epidemiology and ethics, essential in patient-based research projects

➤ the candidate must ... /

- the candidate must participate in research during the training period that must lead to at least one presentation at a national Paediatric conference, but the submission of one manuscript to a peer-reviewed journal would be preferable
- **Ethical issues:**
 - The candidate must be able to:
 - implement ethical standards
 - discuss and comprehend relevant ethical issues

APPENDIX B

3.0 FORMAT AND CONDUCT OF THE EXAMINATION

3.1 Evaluation of competence:

3.1.1 *Evaluation of overall competence of the trainee will be based on:*

- An appraisal by the Educational Supervisor, stating whether the candidate's performance was satisfactory, above average or excellent. An unsatisfactory appraisal will not be acceptable to allow a candidate to enter the examinations
- An examination held by an examination body approved by the HPCSA specialist committee (eg College of Medicine of South Africa) twice a year
- ***The examination will comprise of:***
 - ONE 3-hour paper (with applied basic sciences and clinical questions)
 - OSCE paper [similar to the FC Paed(SA) Part II]
 - Three clinical cases
- ***All three components have to be passed. CMSA examination rules will apply:***
 - the examination may be taken only after a minimum training period of 18 months
 - there will be at least 3 examiners for each component, two of whom will be external examiners and at least 2 will be registered paediatric neurologists
 - upon award of the Certificate, the trainee may apply to the HPCSA for subspeciality registration in Paediatric Neurology

APPENDIX C

4.0 RECOMMENDED READING LIST

4.1 To be recommend by local unit.

APPENDIX D

5.0 RECOGNITION OF TRAINING FROM OVERSEAS INSTITUTIONS

- 5.1 Training that has been obtained from suitable overseas units is to be assessed by the examination committee and recognised as either partially or wholly acceptable for registration in the subspeciality of Paediatric Neurology