

**MEMORANDUM OF UNDERSTANDING**

**BETWEEN**

**THE WORLD FEDERATION OF SOCIETIES OF ANAESTHESIOLOGISTS ("WFSA"),**

**THE INDIAN SOCIETY OF ANAESTHESIOLOGISTS ("ISA")**

**AND CHILDREN'S ANAESTHESIA SERVICES ("CAS")**

**INTRODUCTION:**

This memorandum outlines the wishes and desires of the signatories, in connection with the Mumbai Paediatric Regional Anaesthesia Fellowship at Children's Anaesthesia Services, Mumbai.

**FELLOWSHIP DESCRIPTION:**

In an effort to advance the safety, quality and availability of trained paediatric anaesthesiologists everywhere, the signatories wish to promote the knowledge and skills of anesthesiologists in low resource settings in Asia and Africa.

**Number and Duration of Fellowships:** One fellowship, six months duration, two per year

**Nature of Fellowships** (e.g. area of specialisation): Paediatric Anaesthesia/ Paediatric Regional Anaesthesia

**Name of Fellowship Coordinator / Leader:** Dr Vrushali Ponde

**Overall Aims of Fellowship:** To mentor the trainee in the safe conduct of Paediatric Anaesthesia with a focus on Paediatric Regional Anaesthesia.

Specific aims of the fellowship are listed in Annex 1.

**ROLES & RESPONSIBILITIES**

Recognising that the nature of this fellowship scheme may change from time to time, the signatories assume the following roles and responsibilities:

**WFSA will:**

1. Award a grant of up to US\$ 1,500 to be used for:
  - Travel costs for fellows (airfares)
  - Educational Expenses

This grant is awarded to the institution, not the individual fellows.

2. Advertise the fellowship scheme on its website and support the application process as necessary.
3. Endorse the fellowship scheme and credit the ISA, host institution and host physician(s).
4. Award a joint Certificate of Training to each fellow at the end of his/her fellowship.
5. Consider external teaching visits if requested and as appropriate.

6. Publish reports on the fellowship scheme on its website.

**ISA will:**

1. Endorse the fellowship scheme and credit the WFSA, the host institution and host physician(s).
2. Publicise the fellowship scheme – for example on its website or in its newsletter, and provide links to the scheme on the WFSA website.
3. Support the WFSA and CAS where possible, for example with its educational activities.
4. Facilitate any visa or other immigration requirements for fellows and any external teachers if required.
5. Assist with registration of trainees with the Medical Council of India.
6. Award a joint Certificate of Training to each fellow at the end of his/her fellowship.

**Children's Anaesthesia Services will:**

1. Provide all necessary support, mentoring and supervision of the fellows to ensure the maximum achievement possible of the desired learning objectives.
2. Manage the funds received from the WFSA and provide financial reports on the use of the funds within two (2) months of the end of each fellowship (or group of fellowships).
3. Provide a stipend of Rs 30,000 / month to each fellow during their stay (6 months).
4. Not take any fees or overhead from the grant award.
5. Acknowledge the WFSA funding in any publication or communication about the fellowship scheme.
6. Award a joint Certificate of Training to each fellow at the end of his/her fellowship.
7. Provide a written report, in an agreed format, on the fellowships within two (2) months of the end of each fellowship (or group of fellowships).

Any dispute or disagreement arising from this MoU should be addressed by the WFSA's Education Committee and the Fellowship Coordinator at the host institution in the first instance.

Fellowship schemes often evolve and the parties to this MoU may update this document by mutual agreement at any time. Updated MoU's must also be signed by the representatives of the parties in order to come into effect.

*The WFSA, ISA & CAS do not assume any liability to any person or entity for any claim, damage, loss or injury resulting from the Paediatric Regional Anaesthesia Fellowship at Children's Anaesthesia Services.*

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**The World Federation of Societies of  
Anaesthesiologists**

Represented by the President: Dr David J Wilkinson

Date: 05/01/2015



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**The Indian Society of Anaesthesiologists**

Represented by the Honorable Secretary

Date:

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**The Children's Anaesthesia Societies**

Represented by Dr Vrushali Ponde

Date:

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## Annex 1

### SYLLABUS – MUMBAI PAEDIATRIC ANAESTHESIA FELLOWSHIP

#### 1. Basic Principles

##### Basic sciences

- Cardiorespiratory physiology in infants and children
- Regulation of fluids and electrolytes in infants and children
- Thermoregulation
- Pharmacology
- Anatomical and physiological differences – practical implications

##### Clinical anaesthesia

- Pre-operative preparation
- Paediatric anaesthesia equipment
- Induction of anaesthesia and airway management
- Pain management in infants and children

#### 2. Regional Anaesthesia

The programme will include teaching of a range of regional blocks in neonates, infants and children.

##### Basics of regional anaesthesia

- Local anaesthetic pharmacology
- Dosages and adjuvants
- Treatment of toxicity
- Equipment specific for the paediatric population
- Basics of peripheral nerve stimulators
- Basics of ultrasound guidance

The following **blocks** (single shot or continuous) may be included in day-to-day teaching:

- Central neuraxial blocks
  - Caudal epidural
  - Lumbar epidural
  - Thoracic epidural
- Upper extremity blocks
  - Interscalene
  - Subclavian perivascular
  - Infraclavicular
  - Axillary
- Lower extremity blocks

- Lumbar plexus
- Femoral
- Fascia iliaca
- Sciatic nerve – subgluteal and popliteal
- Trunk blocks
  - Paravertebral
  - Rectus sheath
  - TAP
  - Ilio-inguinal and iliohypogastric

**For each block:**

- Informed consent
- Anatomy and landmarks
- Insertion technique (e.g. loss of resistance, landmark, nerve stimulator or ultrasound-guided)
- Catheter placement, fixation and care

*At the end of the fellowship the candidate should be able to choose and perform the most appropriate regional anaesthetic technique for a given case in the safest manner, taking into account surgical, anaesthetic and patient factors.*

**3. Know the essentials of Paediatric Advanced Life Support (PALS)**

**4. Other Knowledge and Skills**

The following topics will also be covered:

- The pre-operative issues relevant to the anesthetic care of neonates, infants and children, including coexisting morbidities, medications, allergic reactions, labour and delivery history, maternal history, family history, physical examination and evaluation of abnormal findings.
- ASA guidelines for preoperative fasting including clear fluids, breast milk and formula, based upon patient age.
- Tricks and tips for administration of premedication, including agents, routes and side-effects.
- Vagaries of inhalation induction in pediatric patients and the various agents currently available for inhalation induction, including the benefits and side-effects of each.
- Regulation of temperature in infants and children, including compensatory mechanisms, effects of anesthesia and the consequences of hypothermia.
- Thorough understanding of age-related fluid and electrolyte requirements for infants and children including calculation of deficit, intra-operative fluid requirements, glucose requirements and the guidelines, indications and side effects for blood and blood product administration in the paediatric patient.
- When and how use oral/nasal airways, facemasks, LMAs, blades for laryngoscopy and endotracheal tube sizes (cuffed and uncuffed) and their appropriate use in children of all ages.

## 5. Reference Books

- Charles J. Cote MD , Jerrold Lerman MD , Brian Anderson. A Practice of Anesthesia for Infants and Children
  - Peter J. Davis, Franklyn P. Cladis and Etsuro K. Motoyama. Smith's Anesthesia for Infants and Children, 8th edition
  - Bruno Bissonnette. Pediatric Anesthesia Principles – State of the art – Future
  - Vrushail Ponde. Ultrasound guided regional anesthesia, 2nd edition
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