LONG TERM FELLOWSHIP PROGRAM

Synopsis

One of the key focus areas of the VISION 2020: Right to Sight program is the diagnosis and management of avoidable childhood blindness. The problem is compounded by a dearth of trained pediatric ophthalmologists, especially in developing countries.

Our fellowship program is aimed at providing comprehensive and optimal training to paediatric ophthalmologists so that children in the community receive the best possible eye care.

The course focuses on the management of strabismus (pediatric and adult), pediatric cataract, amblyopia and neuro-ophthalmology. The fellows can also imbibe a holistic approach to the management of other pediatric eye disorders, including pediatric cornea and anterior segment, pediatric glaucoma, pediatric retina and basic pediatric oculoplasty.

Program Duration: International trainees: 15 months

Eligibility Criteria

MBBS/ MS/MD /FRCS in ophthalmology or equivalent .

Selection Process

The candidate has to appear for written essay and objective type examinations,, which will focus on all aspects of ophthalmology. Short-listed candidates will appear for an interview where the candidate's knowledge in the particular specialty and overall attitude would be assessed. A keen interest in research will be an advantage.

Sponsored candidates may also be asked for telephonic or skype interview.

Program Objectives

- The pediatric ophthalmology fellow will be trained in the following areas:
- Pediatric cataract – diagnosis, evaluation and management, surgery, postoperative care, amblyopia therapy, prescription of glasses and management of complications. The fellow will also train in genetics and pursue research in pediatric cataract.
- Strabismus and ocular motility disorders – clinical evaluation, diagnosis, management, surgery for all kinds of strabismus, including complex strabismus. Training would be provided to handle strabismus in all age groups. The fellow will also pursue research in the area of strabismus.
- Pediatric glaucoma – clinical diagnosis, medical and surgical management of glaucoma, follow-up and rehabilitation
- Pediatric corneal problems — clinical diagnosis and management of pediatric corneal problems, including metabolic diseases, corneal infections, pediatric allergic diseases, hereditary corneal dystrophies and anterior segment dysgenesis
- Pediatric retinal disorders — including hereditary retinal diseases, retinal degeneration and retinopathy of prematurity – ROP screening and management, including diagnosis, staging, laser surgery, assisting in vitreo-retinal surgery and electro diagnostics in children
- Ophthalmic plastic surgery/oncology – syringing and probing, ptosis, lid anomalies like entropion, epiblepharon and blepharophimosis; management of anophthalmic socket
- Pediatric oncology — Diagnosis, management, research involving pediatric intra-ocular and orbital tumors, especially focussing on retinoblastoma, rhabdomyosarcomas, etc.
- Interpretation of electrodiagnostic tests and CT/MRI scans
- Refractive error and amblyopia management in children and basic low vision aids
- Neuro-ophthalmological disorders in children
- Evaluation and management of nystagmus

- Slit lamp biomicroscopy
- Applanation tonometry
- Gonioscopy direct and indirect
- Pachometry
- Keratometry
- Indirect and direct ophthalmoscopy
- Biomicroscopic indirect ophthalmoloscopy
- Perimetry, including automated perimetry
- Use of Argon and Nd YAG lasers
- Ultrasonograpy (A scan and B scan)
- Slit lamp photography
- Evaluation of children with strabismus, cataract, glaucoma, oculoplasty, tumor related problems and vitreo-retinal disorders
- Strabismus surgery
- During this posting, fellows will learn basic clinical diagnostic and surgical techniques for the
- management of strabismus. They will initially assist during surgery and then move on to independent surgeries, based on their level of competence.

- Evaluation of new patients and follow-up examinations
- Good record-keeping
- Thorough investigations
- Timely consultation reports
- Care and consideration of all patients

Evaluation

Evaluation shall be done at the end of each month, specifically in the department where the fellow is posted with respect to the goals set for each posting.

All fellows will have meeting with mentors and department once in two months.

The purpose of these meetings is:

To understand progress in training and barriers if any

To provide feedback including setting goals for next two months

Review clinical log book

I. Evaluation of the visual acuity of a child

2. Pediatric retinoscopy
3. Evaluation and management of amblyopia
4. Evaluation and management of pediatric cataract
5. Management of complications of pediatric cataract
6. Basic evaluation of squint: concomitant, paralytic and restrictive strabismus
7. Management of simple to complex strabismus
8. Evaluation of common neuro-ophthalmology cases: Optic atrophy, disc oedema, cranial nerve palsies, BICH, myasthenia, idiopathic intracranial hypertension, intracranial tumors, etc
9. Clinical skills in neuro-imaging

I 0. Counselling for pediatric cataract, amblyopia, strabismus cases

Surgical Skills

The fellow should be able to independently perform:

1. Pediatric cataract surgery
2. Strabimus surgery

Additional Competencies

The fellow should be able to do assist in the following procedures:
Pediatric penetrating keratoplasties

Facilities offered

The Institute has excellent structural facilities with 45 examination rooms, nine dedicated operating rooms, top-of-the-line equipment, as well as diagnostic, therapeutic, and ancillary support services. The facilities include an ophthalmic pathology laboratory, a molecular genetics laboratory, a microbiology laboratory, and a limbal stem cell laboratory.

The fellows will also have access to sophisticated audio-visual designing and presentation facilities and a library.

Library: The library is well equipped with a wide variety of books, journals and videos.

Internet access is available 24 hours a day.

Attending in-house conference(s)

Suggested reading

Von Nooden, "Binocular Vision and Ocular Motility"

Kenneth Wright, "Colour Atlas of Strabismus surgery"

Helveston, " Atlas of Strabismus Surgery"

David Taylor, "Practical Pediatric Ophthalmology"

Arthur Rosenbaum, "Clinical Strabismus Management: Principles and Surgical Techniques"

Kenneth Wright, "Pediatric Ophthalmology and Strabismus"

Rowe, "Orthoptics"

Review articles and landmark journal articles, pertaining to the subspecialty

Wilson and Trivedi, "Pediatric Cataract Evaluation and Management"

Walsh and Hoytt, "Clinical Neuro-ophthalmology", 5th edition

Peter Netland and Anil Kumar Mandal, "Textbook of Pediatric Glaucoma"

Gerard, "Prerequisites in Oculoplasty"

Landmark journal articles relating to the speciality