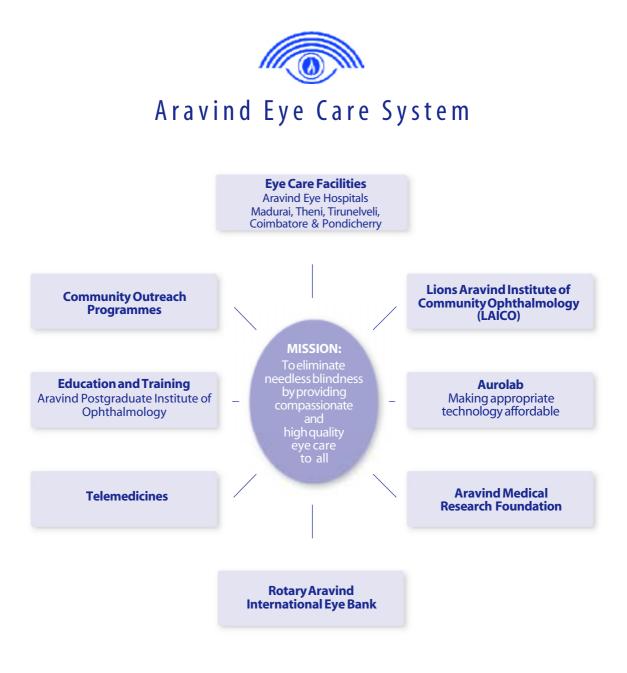


There is a Power within that knows beyond Our knowings; we are greater than our thoughts, And sometimes earth unveils that vision here. To live, to love are signs of infinite things, Love is a glory from eternity's spheres. Abased, disfigured, mocked by baser mights That steal his name and shape and ecstasy, He is still the godhead by which all can change. A mystery wakes in our inconscient stuff, A bliss is born that can remake our life.

— Sri Aurobindo 'Savitri' Book Five, Canto Two



# From the Director

Aravind Eye Hospitals were started with a mission to eliminate needless blindness. Over the last 30 years, Aravind has contributed extensively to prevention of blindness in the country. In 2005, 1, 91,158 surgical procedures were performed. In view of the existing backlog of cataract and other causes of blindness, India requires many more institutions of this kind.

Aravind Eye Hospitals has gained national and international reputation for its service orientation, modern ophthalmic techniques and its community-based outreach activities which deliver quality eye care to the rural masses. Its operational research has practical applications in the formulation of effective blindness prevention programmes. To take on the challenge of blindness, Aravind has recognised the need to develop human resource - ophthalmologists, paramedics and support service personnel.

Several training programmes have been designed to develop ophthalmic manpower. Catering to all levels of ophthalmic teaching and training, these are intended not only for ophthalmologists but also for ophthalmic technicians, opticians, clinical assistants, outreach coordinators and health care managers. These training programmes are both long term and short term, and some of these are affiliated to state universities. The postgraduate clinical courses are affiliated to Tamilnadu Dr. MGR Medical University, Chennai. The courses in hospital and health care management are affiliated to Madurai Kamaraj University. Apart from these, a six week training course in the maintenance of ophthalmic surgical instruments and other equipment for technicians is also offered.

Dissemination of knowledge and skills in eye care will not only satisfy the needs of the institution but also take care of the needs of the country. Aravind has also recognised the need for transition from conventional surgical procedures to state-of-the-art techniques in management of cataracts. It offers short term training courses in IOL microsurgery, lasers in diabetic retinopathy management and glaucoma diagnosis and therapy and also a five day course in instrument maintenance for ophthalmologists.

Continuing Medical Education programmes and workshops are offered on a regular basis. The institution along with Lions Aravind Institute of Community Ophthalmology works with several eye hospitals in India and abroad to improve their capacity to provide high volume, high quality care and enabling them to become financially selfreliant in the long run.

Aravind Eye Care System has extended its activities by expanding the research facilities and has started Ph.D programme in ophthalmology, genetics and immunology for medical graduates in affiliation with the Tamil Nadu Dr. MGR Medical University; Ph.D in affiliation with Madurai Kamaraj University in Biomedical science for nonmedical graduates, and Ph.D in Biotechnology and Humanities and Social Sciences in affiliation with Indian Institute of Technology, Chennai. This publication gives an overview of all the academic and training programmes offered by the Aravind Postgraduate Institute of Ophthalmology and the Lions Aravind Institute of Community Ophthalmology.

#### Dr. M. Srinivasan

Director - Aravind Eye Hospitals & Postgraduate Institute of Ophthalmology Lions Aravind Institute of Community Ophthalmology, Madurai





COMMUNITY OUTREACH Over 430,000 patients examined in the community and over 100.000 operated annually



### LAICO

Premier institute promoting worldwide management in eye care through training and capacity building in over 200 eye hospitals



EDUCATION & TRAINING 25 ophthalmologists, 30 sub-specialists in ophthalmology, over 200 ophthalmic assistants produced annually – a leading ophthalmic training facility





#### AUROLAB

World-class ophthalmic supplies at low cost – making eye care affordable: reaching over 120 countries and providing over 5% of the global cataract surgical supplies



RESEARCH Ranging from Stem Cells to understancing barriers to access – focus on evidence for action



EYE BANK Collection, evaluation, preservation and distribution of corneas Over 2000 eye balls were collected in 2005 Offers training in Eye Banking and Corneal Transplantation



TELE-OPHTHALMOLOGY Bridges the gap between specialists and patients through IT enabled Village Vision Centres V-SAT equipped Mobile Van Geared to impart education and training in eye care with a global reach

# **Training infrastructure**

LAICO and Aravind provide excellent infrastructure for teaching and learning. In addition to the collection of books, periodicals, videotapes, audiotapes and CDs in the library, there are adequate facilities for direct experiential learning especially in clinical work. Most of the diagnostic or surgical equipment such as slit lamps, indirect ophthalmoscopes, operating microscopes and laboratory microscopes have observerscopes, video cameras or still cameras attached to them. These enable students to follow closely, the surgical procedures performed by the surgeon or vice versa. Students can also record their surgery for a more detailed clinical review later.

Surgical training is imparted in a special training wet lab using animal eyes with specific teaching microscopes. Surgical steps are tailored in a graded manner to encourage residents record their initial cases and review them later with a consultant. Teaching and surgical schedules also incorporate the use of CD ROMs.

Aravind has recently commissioned tele-ophthalmology technology within its network that are currently connected with world renowned institution like Johns Hopkins University, USA for academic learning and case consultations that helps doctors interact with best faculty facilitating cross learning for enriched inputs and enhance their skills with latest developments in Ophthalmology through online collaborative opportunities. In future, institutions like Cornell University, USA and others will collaborate with Aravind.

An extensive computer network, statistical software and the team of bio-statisticians provide valuable support for research and thesis work. The Medical Records Department maintains case sheets for all patients regardless of where they are treated - eye camps, free hospital or paying hospital. A computerised system allows easy retrieval of these case sheets (based on diagnosis, treatment, age or place) for research and thesis work.

There are several classrooms in Aravind and LAICO which are designed for better interaction. The teaching aids include slide projectors, over head projectors and video projectors. The use of computergenerated slides projected through a video projector is commonly used. Students are encouraged to use these latest technologies for their presentations and case discussions.

Aravind Library and Information Centre houses a wealth of literature on ophthalmology. The resource centre stocks journals, books, pamphlets and health education materials related to eye care. In addition to national and international journals, an array of videocassettes and audiovisual aids are available. There are separate rooms for study and the use of audiovisual equipments. Aravind library also has Medline and Internet search facilities.

# **Training Courses**

#### 1. Postgraduate Courses in Ophthalmology

Diploma Course in Ophthalmology (DO) MS in Ophthalmology (MS) Diplomate of the National Board (Ophthalmology) (Dip N.B)

# 2. Ph.D Courses

Ophthalmology Genetics Immunology Biomedical Sciences Humanities & Social Sciences Bio-Technology

### 3. Ophthalmology Fellowhip-Long Term

Retina-Vitreous Diabetic Retinopathy & Medical Retina Cornea Pediatric Ophthalmology and Strabismus Glaucoma Anterior Segment/Intraocular Lens Surgery Uvea Orbit and Oculoplasty

#### 4. Ophthalmology Fellowhip-Shot Term

Paediatric Ophthalmology (Only for International candidates)

#### 5. Clinical Courses - Short Term

IOL Microsurgery Small Incision Cataract Surgery Phacoemulsification Diagnosis and Management of Glaucoma Lasers in Diabetic Retinopathy Management Training in Low Vision Orientation to the Paediatric Ocular Anesthesia for Anesthesia

## 6. Paramedical Courses in Ophthalmic Practices-Long Term

Post-graduate Diploma in Optometry Post-graduate Diploma in Ophthalmic Assistants

# 7. Paramedical Courses in Ophthalmic Practices-Short Term

Certificate Course for Clinical & Supervisory Skills Development in ophthalmic Paramedical Personnel Certificate Course in Optical Dispensing Training Course for Orthoptist Training Course for Paediatric Nurses Training Course for Paediatric Counsellors Certificate Course in Fundus Fluorescein Angiography and Ultrasonography

# 8. Management Courses

Management Training for Eye Care Programme Managers Management Priorities in Eye Care Delivery Management Training & Systems Development for Hospital Administrators or Managers Fellowship in Eye Hospital Management Postgraduate Diploma in Hospital Management

### 9. Task-Oriented Training Courses

Certificate Course on Instruments Maintenance for Technicians Certificate Course on Instruments Maintenance for Ophthalmologists Certificate Course on Community Outreach and Social Marketing of Eye Care Services Certificate Course on Community Outreach Paediatric Eye Care Services

# 10. Custom Designed Courses

11. Continuing Medical Education Programmes

# Postgraduate Courses in Ophthalmology

Postgraduate training at Aravind offers excellent opportunities to develop skills in a clinical setting geared for high volume and high quality eye care. Postgraduates will be posted by rotation at various units in the paying hospital, the free hospital and in the satellite hospitals. They will be trained to prepare cases for effective presentation in the presence of senior consultants. Postings in the outpatient departments, wards and operation theatres will enable them acquire a hands-on learning experience of various aspects of treatment - preoperative, surgical and postoperative. They will be guided in surgery and in using advanced equipment for diagnosis and treatment. They will also be encouraged to present papers at state and regional ophthalmic conferences. An integral part of the postgraduate training is community outreach camps. Residents are required to attend at least two camps every month throughout the duration of the course. Application forms can be obtained from the office of Aravind Eye Hospital, Madurai, or by post on payment of the prescribed fee. It can also be downloaded from the website www.aravind.org; www.laico.org.

Admission

University.

The admission by the hospital is

provisional, subject to the ap-

proval of the qualification and

acceptance for registration by

Tamil Nadu Dr. MGR Medical

# Diploma in Ophthalmology (100)

#### Eligibility

MBBS degree of any University recognized by the Tamil Nadu Dr. MGR Medical University and the Medical Council of India. Candidates who have done their schooling and medical graduation outside the state of Tamil Nadu should submit an eligibility certificate obtained from Dr. MGR Medical University, Chennai.

No of Candidates Eight per year

**Offered At** Aravind – Madurai

**Contact** prajna@aravind.org

# Diploma in Ophthalmology (DO)



#### Duration

Two years. The course begins in May of every year.

#### **Examination Pattern**

PAPER 1 - Basic Sciences (as related to Ophthalmology). At the end of the second year, there are two theory papers:

PAPER 2 - Optics, Principles of Orthoptics, Refraction and Community Ophthalmology.

PAPER 3 - Medical and Surgical Ophthalmology. At the end of the second year, candidates will have to appear for the theory paper and a clinical practical examination. This will be followed by a *viva voce* in the afternoon.

#### Postgraduate Courses in Ophthalmology

# MS in Ophthalmology

# Eligibility

MBBS degree of any university recognised by the Tamil Nadu Dr. MGR Medical University and the Medical Council of India. Candidates who have done their schooling and medical graduation outside the state of Tamil Nadu should submit an eligibility certificate obtained from Dr. MGR Medical University, Chennai.

**No. of Candidates** Six per year

**Offered at** Aravind – Madurai

Contact prajna@aravind.org

# Master of Surgery (Ophthalmology) (MS)



# Admission

The admission by the hospital is provisional, subject to approval of qualification and acceptance for registration by Tamil Nadu Dr. MGR Medical University.

#### Duration

Three years. The course begins on 1st May of every year.

#### **Examination Pattern**

PAPER 1 - Basic Sciences (as related to Ophthalmology)PAPER 2 - General Surgery (Theory)There is no examination during the second year. At the end of the third year, there are three theory papers:

PAPER 3 - Optics, Refraction, Neuro Ophthalmology and Community Ophthalmology.

PAPER 4 - Orthoptics, Ophthalmic Medicine and Ophthalmic Surgery. PAPER 5 - Ophthalmic Medicine and Ophthalmic Surgery

At the end of the third year, candidates will have to appear for all the theory papers as well as Clinical Practical Examination. Candidate should also submit a dissertation on a topic of their choice.

# Eligibility

MBBS degree and a pass in Part-I of the Examination of the National Board/Central entrance test are eligible to join this course

# No. of Candidates

Madurai	5	per	year
Coimbatore	2	per	year
Tirunelveli	2	per	year
Theni	4	per	year

#### Offered at

Aravind - Madurai Aravind - Coimbatore Aravind – Tirunelveli Aravind – Theni

# Contact

prajna@aravind.org

# Diplomate of the National Board (Ophthalmology) (DIP.NB)

# Duration

Three Years. The course begins on January 1st at Madurai and Coimbatore, July 1st at Tirunelveli and Theni of every year.

# **Examination Pattern**

Candidates will have to appear for their examination at the end of the third year. The examination pattern

comprises four theory papers, and a clinical practical examination followed by a viva voce. Candidates are also required to submit a dissertation at the end of the third year.

The theory examinations will be held at any of the state capitals. The clinical Practical examination will be conducted at one of the Regional Institutes of Ophthalmology or centers designated by the National Board of Examinations, New Delhi.

# **Ph.D Programmes**

#### Eligibility

M.B.B.S or M.Sc. in Biology / Biotechnology / Biochemistry / Microbiology / Genetics / Molecular Biology. Two years of research experience is required for SRF. The Tamil Nadu Dr. M.G.R. Medical University and Madurai Kamaraj University have recognized Aravind Eye Hospital for Ph.D. Studies. Dr.VR.Muthukaruppan, Dr.P. Namperumalsamy, Dr. G. Natchiar and Dr. P. Sundaresan have been recognized as supervisors in the field of Ophthalmology, Immunology and Genetics.

#### Ph.D. Programmes

Junior Research Fellow and Senior Research Fellow could register for Ph.D under Madurai Kamaraj University (Non medical students), Madurai or in the Tamil Nadu Dr MGR Medical University (Medical students), Chennai.

### Eligibility

60% in PG degree, Pass in GATE or UGC or CSIR, Should have obtained PG 10 years earlier as on the last date prescribed for receipt of complete application. **AGE:** Should have completed 35 years for MS Should have completed 45 years for Ph.D

**Offered at** Aravind – Madurai

**Contact** prajna@aravind.org

# MS / Ph.D under External Registration

Aravind Eye Care System as an NGO has been recognised by IIT-Madras as an approved centre for external PhD to sponsor for its employees. The approval is in two areas,

- 1. Humanities & Social Sciences
- 2. Bio-Technology

Traditional Nature of Sponsoring Organisation: For External PhD at IITMadras

- 1. Applicants from R&D establishments, public utility undertakings and industrial units with well established R&D units recognized by DST, may be considered for admission. If an individual unit has an R&D unit not recognized by DST, recognition of such an unit for the purpose of external registration scheme may be given in individual discipline by the board of academic research on the advice of the concerned department after inspection of facilities wherever required.
- 2. Only personnel involved in Research and Analysis in service organizations like Banks, Government Departments, LIC etc. would be considered for external registration.

# Long Term – Ophthalmology Fellowship

### Eligibility

Postgraduates in Ophthalmology (MS or Dip.NB) are eligible for this course. The maximum age limit is 33 years. The fellowship programmes are designed to enable ophthalmologists to enhance their professional skills with advanced training in an area of their choice. Few centres in India offer specialized ophthalmological training. In response to the need for such specialists, Aravind-Madurai instituted the fellowship programmes in the mid-eighties. The first fellowship was offered in management of vitreous-retinal diseases.

Fellowship Programmes are offered in the following subspecialties:

- Retina Vitreous
- Cornea
- Pediatric Ophthalmology and Strabismus
- Glaucoma
- IOL Microsurgery
- Uvea
- Orbit and Oculoplasty

#### Eligibility

MD/MS/DNB (from a centre recognized by Medical Council of India)

No. of Candidates Three per year

Duration 12 Months

**Offered at** Aravind - Madurai

Contact kim@aravind.org uma@aravind.org

# Fellowship in Diabetic Retinopathy and Medical Retina

Aravind Eye Hospital in partnership with Technology Information, Forecasting and Assessment Council (TIFAC - CORE) has established



this long-term Fellowship training programme to provide high quality training for the general ophthalmologists as well as postgraduates in ophthalmology . TIFAC-CORE has all the necessary infrastucture and a well established Retina - Vitreous centre with a high patient volume to provide excellent hands-on

#### training.

The objective of this fellowship is to expose the candidate to the basic understanding of the various retinal disorders, to familiarize the candidate with the various examination techniques that are essential in the diagnosis and staging of diabetic retinopathy like slit lamp biomicroscopy, indirect ophthalmoscopy, indirect slitlamp biomicroscopy, fundus fluorescein angiography, Indocyanine Green angiography (ICG), Optical Coherence Tomography (OCT), Ultrasonography, Electro-physiological tests, etc., and the treatment of retinal diseases

including the various laser techniques. The training programme thus arms the ophthalmologist with the up-to-date knowledge of the various retinal disorders and ensures both accurate and timely diagnosis as well as treatment to prevent needless blindness. The training programme also kindles the scientific temperament of the candidates, by way of active academic debates, journal clubs and publications. With the advent of Telemedicine in the institution, video conferencing has become a reality now. Moreover as the institution is involved in a lot of community outreach activities, the candidate also will be involved in various community service, thereby also contributing to the national cause.

**No. of Candidates** Eight per year

**Duration** Twenty Four Months

Offered at Aravind - Madurai Aravind – Coimbatore DURATION 2 Years

**Contact** prajna@ aravind.org

#### Fellowship in Retina -Vitreous



This fellowship provides an exposure to both clinical and research work with emphasis on diagnosis, interpretation, and curative aspects of diseases in the posterior segment. The diagnostic techniques include indirect ophthalmoscopy,indirect slit lamp biomicroscopy,fundus fluorescein

angiography, lectrophysiology, ultrasonography and various other methods of ocular examination. Surgical training includes assisting in retinal detachment repair, vitreous-retinal surgical procedures and ocular trauma management. Training is also imparted in the use of laser photocoagulation techniques for numerous posterior segment disorders including managment of diabetic retinopathy and transpupillary thermotherapy for age related macular degeneration. Besides independent surgery, fellows will be involved in teaching and training postgraduates and trainees in the short-term course in "Indirect Ophthalmoscopy and Lasers in Management of Diabetic Retinopathy." Fellows may go on to advanced specialization in retinal studies and practice in institutional settings. At the end of the fellowship, the fellow would have assisted at least 200 major vitroretinal surgeries, individually done scleral buckling procedures and simple vitrectomies and at least 250 lasers and 250 FFAs.

#### Fellowship Programmes

**No. of Candidates** Four per year

**Duration:** Eighteen months

**Offered at:** Aravind - Madurai Aravind – Coimbatore

**Contact:** prajna@aravind.org

Fellowship in Cornea



This fellowship provides extensive training in all medical and surgical aspects of corneal pathology. The surgical exposure includes keratoplasty, pterygium, corneal traumas, conjunctival patch grafts, and excision of surface tumors and refractive surgery. Fellows in the cornea clinic will work in tandem with the contact lens clinic which fits

around 150 pairs of lenses a month.During the last three months, fellows will gain experience in administering cornea service independently at any one of the Aravind satellite hospitals. The department has facilities for topography for corneal profiles, specular microscopy, ultrasonography and Lasik refractive surgery. The cornea clinic works in close association with the Microbiology Laboratory. The surgical exposure includes over 200 IOL surgeries, and about 25 corneal transplants. In addition, they will have a chance to do lasik surgery on cadaver eyes.

### **No. of Candidates** Five per year

**Duration** Eighteen months

**Offered at** Aravind - Madurai Aravind - Coimbatore

**Contact** prajna@aravind.org

# Fellowship in Pediatric Ophthalmology and Strabismus



Aravind-Madurai was the first centre in India to offer a fellowship in pediatric ophthalmology.

This fellowship provides training in diagnosis and management of various childhood eye problems such as strabismus, amblyopia, congenital cataract, congenital glaucoma and other

congenital and developmental ocular disorders in children. Training is also provided in visual rehabilitation of children following cataract surgery. Fellows will perform around 300 cases of adult cataract surgery, 100-150 paediatric cataracts, 15-20 cases of strabismus surgery and minor procedures like probing, enucleation, etc. The fellows will also be involved in clinical teaching for postgraduates, helping them in preparing thesis and making presentations in Continuing Medical Education (CME) programmes relating to Pediatric ophthalmology.

# Fellowship Programmes

**No. of Candidates** Five per year

**Duration** Two years

Offered at Aravind - Madurai Aravind - Coimbatore Aravind - Tirunelveli

Contact prajna@aravind.org

#### Fellowship in Glaucoma



The Aravind eye hospitals have well equipped glaucoma services at their hospitals in Madurai, Tirunelveli and Coimbatore manned by suitably trained faculty to offer excellent scope for training in methods of glaucoma diagnosis and treatment. Early detection and intervention are important in preventing irreversible loss of vision due to glaucoma. The

high clinical load at the glaucoma clinics combined with clinical infrastructure facilitate advanced training in this specialty.

This fellowship offers a wide exposure in diagnosis and management of all clinical types of glaucoma. Fellows will be trained in diagnostic procedures such as gonioscopy, disc evaluation, and interpretation of visual fields. Hands-on training is also provided in use of lasers and surgical management of glaucoma. At the end of the programme, fellows will be proficient in early detection, and in medical, laser and surgical management of glaucoma. They will perform around 150 to 200 surgical procedures for glaucoma, trabeculectomy and combined Extra Capsular Cataract Extraction (ECCE) with posterior chamber lens implantation.

# No. of Candidates Ten per year

duration Two years

offered at Aravind - Madurai Aravind - Coimbatore Aravind - Tirunelveli Aravind - Pondicherry

contact prajna@aravind.org

# Fellowship in Anterior Segment/Intraocular Lens Microsurgery



This fellowship offers adequate training in general ophthalmic surgery. Excellent training is offered in general ophthalmology, microsurgery, external surgical procedures such as orbit and oculoplasty, Dacrocystotomy (DCT), pterygium and cataract procedures using a variety of techniques including Phaco.

Opportunities are offered to refine diagnostic skills with the use of sophisticated equipment such as Keratometry, A-Scan, Gonioscopy, Three mirror lens and YAG Laser. The surgical volume in this fellow-ship includes around 800 ECCE/PC-IOL, 60 orbit and oculoplasty procedures, 20 DCRs, 20 DCTs, 200 SICS and 25 Phaco Surgeries.

#### **Fellowship Programmes**

**No. of Candidates** One per year

**Duration** Eighteen months

**Offered at** Aravind – Madurai

**Contact** prajna@aravind.org

#### Fellowship in Uvea



Uvea clinic of Madurai has the distinction of being one of the largest Uveitis clinics internationally; it works 6 days a week examining nearly 2000 new cases every year. It is one of very useful few full time Uveitis clinics in India.

This fellowship is intended for candidates with special interest in internal medicine. The uvea clinic

at Aravind, with the largest volume of patients with uveal diseases, offers wide exposure in their diagnosis and management. Exposure to clinical challenges like sympathetic ophthalmia Behcet's syndrome and Vogt-Koyanagi Harada syndrome train the candidate in treatment with immunosuppressive agents. Candidates can participate in short clinical trails and experimental research that are being conducted. Apart from training in microsurgery, candidates will also get to operate complicated cataracts.

# **No. of Candidates** Two per year

**Duration** Eighteen months

**Offered at** Aravind – Madurai

**Contact** prajna@aravind.org

#### Fellowship in Orbit and Oculoplasty



Oculoplasty a subspecialty in ophthalmology handles anomalies and abnormalities of lids, lacrimal system, extra ocular structures, bony orbit and other structures around the eye. The institute has excellent support facilites; diagnostic equipments like ultrasound, X-ray units,CT scan, MRI(outside

collaboration) photography, audio – visual department, library facilites, well established ocular microbiology, pathology, immunology and genetic lab.

This fellowship offers wide exposure to orbital disorders and external diseases of the eye and provides adequate training in medical and surgical management of these disorders. At the end of the course, fellows will be able to perform Plastic procedures like Entropion, Ectropion, Ptosis, Lid Reconstruction, various Grafts, Probing, DCT, DCR, Exenteration, Socket Reconstruction, Orbital Implants and orbital surgeries.

# Short Term Courses - Fellowship

# Short Term Courses (Ophthalmology)

Ophthalmology is one of the fields in medicine that has witnessed rapid advancements both in diagnosis and treatment. Due to lack of equipment and trained manpower, very few residency programmes have been able to keep abreast of such developments .Thus postgraduates don't have an exposure to new developments and practicing ophthalmologists have nowhere to learn these new skills. In order to bridge the gap, Aravind has developed three intensive eight-week courses on IOL Microsurgery, Lasers in Diabetic Retinopathy and Glaucoma Diagnosis and Therapy.

### Eligibility

Qualified Ophthalmologists with minimum 3 years of surgical experience in ophthalmology

No. of Candidates 1 per batch (2 per year)

**Duration** Six months

Offered at Aravind - Madurai

**Contact** childreneye@aravind.org

# Paediatric Ophthalmology (only for International Candidates)



The primary purpose of this fellowship is to promote the development of an ophthalmologist who has the appropriate level of knowledge, skills, and competence to work independently and effectively as a consultant in pediatric ophthalmology. However child centered approaches and team

working are also of vital importance. The fellow will be oriented in setting up a pediatric ophthalmology service in their service area. The fellow will be assigned a suitable subject for research in pediatric ophthalmology and/or strabismus.

#### Outcome

- Perform a comprehensive assessment of a child with a visual / ocular problem.
- Diagnose and manage acute illness / injury / with chronic disease / disability.
- Provide rehabilitation with multidisciplinary team
- To demonstrate an appropriate level of competency in the following "Sub-Specialties": Neonatology, Refraction and Low vision care
- Also will be exposed to community outreach programmes mostly concentrating on detection of ocular problems in children at community level including screening programmes in schools.

#### Selection Criteria

- International Candidates only who exposure to Paediatric Ophthalmology with a good surgical experience.
- Preference will be given to the candidates recommended by ORBIS, any eye Institutes or other Non Governmental Organisations.

# Short Term Courses - Ophthalmology

#### Eligibility

Practicing Cataract surgeon with a MS/DO/ DNB

No. of Candidates 6 per month

**Duration** One month

# Offered at

Aravind - Madurai Aravind - Coimbatore Aravind - Tirunelveli

**Contact** Dr. Haripriya training@aravind.org

# ECCE/IOL Micro Surgery



It is the first training course in the country to offer hands-on skills development. The course attracts practicing ophthalmologists from India and abroad. Selection will be done by Aravind staff. Preference will be given to ophthalmologists affiliated to institutions engaged in community work and with adequate infrastructure for microsurgery. A

reassessment at the end of two weeks will certify candidates to continue in the course. Candidates from other developing countries will also be eligible, subject to fulfilling the procedural formalities of the Indian Medical Association and The Medical Council of India. Candidates must apply in the prescribed application form and will be admitted after review of their credentials and certificates.

By the end of the course, trainees will do about 90 surgical procedures, half of which will be assisted by Aravind faculty and the rest independently under gross supervision. Trainees will be provided opportunities to refine their skills in using the slit lamp, Keratometer, and A-scan. They will also be exposed to the use of YAG laser. Nonclinical activities include lectures, library work and reviewing cases recorded on video. In addition, they will receive exposure to record keeping, documentation and reporting.

#### Eligibility

This course is open to only those candidates who have completed ECCE/IOL at Aravind & Qualified practicing Opthalmologist with MS/DO degree from recognized university with good experience in ECCE/IOL surgery.

# **No. of candidates** 6 per month

Duration

One month

### **Offered** at

Aravind – Madurai Aravind – Tirunelveli Aravind – Coimbatore

#### Contact

Dr. Haripriya training@aravind.org

# Small Incision Cataract Surgery



This course was started in March 2003 to train Ophthalmologists in manual SICS. For ophthalmic surgeons all over the world, manual SICS provides the ideal stepping stone to mastering phacoemulsification. The objective of this course is to convert an ECCE surgeon to perform SICS with the help of a well structured training program.

The highlights of the course are:

- Aravind offers a state of the art wet lab facility which provides SICS training on cadaver eyes. Candidate will have training on cadaver eyes and Goat eyes at the wet lab prior to performing real time surgery.
- Surgeries supervised by senior instructors till the surgeon gains confidence to perform independent surgeries.
- Structured classes on various topics related to SICS with the help of videos.
- Access to various standard and recent books and videos in the library.
- Post operative review of cases by senior consultants.
- Maintenance of case records for future personal use.

### Eligibility

- Candidates who have undergone SICS training at Aravind Eye Hospital (Madurai, Tirunelveli or Coimbatore)
- Practicing ophthalmologists who have performed a minimum of 20-30 manual SICS

# no. of Candidates

6 per month

**Duration** One month

#### Offered at

Aravind – Madurai Aravind – Tirunelveli Aravind – Coimbatore Aravind – Pondicherry

Contact

Dr. Haripriya training@aravind.org

# Phacoemulsification



This course was started in 2005. With the advancement of cataract surgery, small incision techniques like phacoemulsification have overtaken conventional sutured techniques. This course is especially designed for ophthalmologists trained in manual SICS having knowledge of tunnel construction and capsulorhexis. It aims at training the candidate in phacoemulsification surgery as well as maintenance of the phaco machine. The highlights of the course are:

- Aravind Alcon Center For Surgical Advancement: Aravind has partnered with Alcon to offer a state of the art wetlab facility which provides phacoemulsification training on animal eyes. Candidates will have exposure to the phacomachine at the center prior to performing real time surgery
- Access to various standard and high end phaco machines and newer IOLs
- Structured classes on the maintenance and servicing of phacoemulsification machines and their accessories
- Surgeries supervised by senior instructors till the surgeon gains confidence to perform independently
- Various video assisted lectures including phacodynamics, Phaco Techniques, Newer Phaco Technologies, Phaco in challenging cases, Newer IOLs etc.
- Maintenance of case record for future personal use
- Updated library and video bank

#### Eligibility

Ophthalmologists and postgraduates in Ophthalmology

No. of Candidates 6 per month

**Duration** Eight weeks **Glaucoma Diagnosis and Therapy** 



The glaucoma service at the Aravind Eye Hospital with over 2000 patient visits every month, is well equipped to offer excellent hands on training in glaucoma diagnosis and therapeutics. This programme has been established to provide high quality training to practising ophthalmologists

#### Offered at

Aravind - Madurai Aravind - Tirunelveli Aravind - Coimb<u>atore</u>

**Contact** Dr. Ramakrishnan glaucoma@tvl.aravind.org and postgraduates in ophthalmology in diagnosis and therapy of glaucoma. Trainees gain experience and proficiency in early diagnosis and classification of glaucoma, critical clinical evaluation of the optic nerve head and retinal nerve fibre layer, interpretation of the visual fields by automated computerized perimetry and fundus photography. It also teaches medical, laser and surgical modalities of glaucoma management. The curriculum provides extensive hands-on training supplemented by live demonstrations and lecture classes. The curriculum will include:

- Ophthalmoscopic evaluation of the optic nerve head
- Clinical evaluation of retinal nerve fibre layer in glaucoma, tonometry, gonioscopy
- Interpretation of the visual fields by automated perimetre
- Medical, laser and surgical modalities of glaucoma management

#### Eligibility Ophthalmologists and postgraduates

**No. of Candidates** Four per month

**Duration** Eight weeks

**Offered at** Aravind - Madurai Aravind - Coimbatore

Contact Dr. Kim <u>uma@aravind.org</u>

# Lasers in Diabetic Retinopathy Management



Diabetic retinopathy is one of the foremost causes of blindness in the developing countries. Early detection and timely treatment of diabetes can substantially reduce the risk of vision loss or blindness. Aravind Eye Hospital has all the necessary infrastructure and a well established Retina-vitreous Service with a high patient load to provide excellent hands-on training on Lasers in Diabetic Retinopathy Management.

Aravind has committed itself to aid in

the management of posterior segment disorders especially in the use of lasers in the treatment of diabetic retinopathy by training practicing ophthalmologists. LAICO in partnership with sight savers international,UK, has established this training programme to provide high quality training for the general ophthalmologists as well as postgraduates in ophthalmology.The curriculam provides a hands on experience supplemented by live demonstrations and lecture classes.A faculty member will be constantly available to demonstrate and assist the candidate at all stages.

#### Eligibility

Ophthalmologist, Optometrist, Orthoptist, Rehabilitationist who are involved in Low Vision Services

No. of Candidates One per month

**Duration** One month **Offered at** Aravind - Madurai

**Contact** Dr. Ilango Courses@aravind.org

# Training in Low vision



This course provides a comprehensive low vision training at a one to one personal, supervised level, there by developing a skilled, motivated professional to later establish quality low vision services. By the end of the training programme the candidate will be able to.

1. Apply the concepts of establishing a standard low vision module with basic infrastructure for sustained delivery of low vision services.

- 2. Apply the principles and strategies for increasing the uptake of eye care services through networking.
- 3. Develop skills in diagnostic, procedures for evaluation, use of optical and non optical aids, principles of vision stimulation in vision rehabilitation.
- 4. Apply the principles and practices of low vision, in the management of low vision patients.

# Orientation to Paediatric Ocular Anesthesia for Anesthetist (Doctor)

**Eligibility** Diploma or degree holder in anesthesia

**No. of Candidates** One per month

**Duration** One month

**Offered at** Aravind - Madurai

**Contact:** Dr. Vijayalakshmi childreneye@aravind.org The main objective of this course is to highlight the paediatric problem unique to Ophthalmology and familiarize with equipment both surgical anesthesia (adapted ) used in Ophthalmology and the problems of working in a dark room. The contents of this includes introduction to paediatric anesthesia (pre & post anesthesia procedures), special considerations in ocular anesthesia, Congenital anomalies & Ophthalmic anesthesia and Paediatric resuscitation.

# Paramedical Courses - Long Term

#### Affiliation

Madurai Kamaraj University

#### Eligibility

Any Graduate of Madurai Kamaraj University or of any other university recognized by the U.G.C. Preference will be given to sponsored candidates. Science graduates preferred.

No. of Candidates 25 per batch

Duration Two years

**Offered at** Aravind – Madurai

**Contact** Dr. Usha Kim nursing@aravind.org

# Post Graduate Diploma in Optometry



At present in our country much of the time of ophthalmologist is spent in assessing the refractive errors of the patients and prescribing spectacles. In western countries this is done by a cadre of persons trained in optometry. If we are able to train and provide qualified optometrists, much of

the time of ophthalmologists will be available for treating of other ophthalmic ailments. The duration of the course will be of two academic years which includes

- I year : Course study with theory and practical classes
- II year: Internship training in Aravind Eye Hospital with stipend

# **Objective of the Course**

- To enable the students to assess the refractive error of the patient and prescribe spectacles.
- To enable them to perform opthalmalic diagnostic procedures

# Scope

A qualified optometrist is trained to examine, diagnose and correct refractive errors by prescribing vision aids and vision therapy exercises. An optometrist is eligible to set up an optical shop, prescribe glasses, contact lens and low vision aids.

### Paramedical Courses – Long Term

# Madurai Kamaraj University

# Eligibility

Any Graduate of Madurai Kamaraj University or of any other university recognized by the U.G.C. Preference will be given to sponsored candidates. Science graduates preferred.

# **No. of Candidates** 25 per batch

Duration Two years

**Offered at** Aravind – Madurai

**Contact** Dr. Usha Kim nursing@aravind.org

#### Post Graduate Diploma in Ophthalmic Assistance



An efficient and knowledgeable ophthalmic assistant can lend immeasurable support to a successful ophthalmic practice, if he/ she is competent. Since an ophthalmic assistant is an invaluable asset to the ophthalmic team in preserving and improving vision. This course helps to create job opportunity and to achieve

job satisfaction, with a high level of competence thereby increasing the work efficiency and productivity of the existing 10,000 ophthalmologists in India. The duration of the course will be of two academic years which includes

- I Year : Course study with theory and practical classes
- II Year: Internship training in Aravind Eye Hospital with stipend

# **Objective of the Course**

The objective of this course is to provide better clinical ophthalmic assistance to ophthalmologist. The broad areas covered are basic sciences, microbiology, common diseases of the eye, operation theatre and ward, and individual development.

#### Scope

Ophthalmic Assistants are in great demand today due to explosive growth of Eye Care Industry. This course aims at providing vocational skills to graduates to enable them to fit into any opthalmalic setting.

# Paramedical Courses – Short Term

#### Eligibility

Higher Secondary or equivalent. Paramedics with atleast 3 months experience in outpatient, operation theatre, ward and refraction activities

#### **No. of Candidates** 10 per batch

**Duration** Three months

**Offered at** Aravind - Madurai

**Contact** Dr. Usha Kim nursing@aravind.org

# Certificate Course in Clinical & Supervisory Skills Development for Ophthalmic Paramedical Personnel

This course is offered in collaboration with IAPB (International Agency for Prevention of Blindness) in achieving the objectives stated in VISION 2020: The Right to Sight. The overall aim is to enhance clinical and supervisory skills so as to improve the effectiveness of the paramedics' services. This course is not designed to provide basic clinical training but to upgrade the existing skills. The broad areas covered are operation theatre and ward, outpatient and refraction.

#### **Objective of the Course**

- Develop supervisory skills planning, scheduling, effective eye care service, effective time management, communication skills and delegation skills
- Enhance clinical skills to support the ophthalmologists.
- Technical skills Equipment maintenance.
- Educational skills patient counselling, patient education At the end of the course the candidate will be able to improve the

workflow to support cost effective eye care service, promote patient centered flow care with continuous quality improvement with patient satisfaction and ensure routine maintenance of equipment and instruments.

#### Eligibility

Higher Secondary or equivalent. Working knowledge in basic English which will be the common medium of instruction for the course

**No. of Candidates** 10 per batch

**Duration** Three months

**Offered at** Aravind - Madurai

**Contact** Dr. Usha Kim nursing@aravind.org

# Short Term Course in Optical Dispensing

Uncorrected refractive errors are a significant cause of avoidable visual disability, especially in developing countries. Lack of awareness and recognition of this correctable cause of visual disability compounded by the non-availability of affordable optical services has been indicated in WHO surveys of blindness and visual impairment worldwide. Uncorrected refractive errors could lead to amblyopia in children and may lead to visual loss. This avoidable blindness can be easily prevented by wearing appropriate spectacles. WHO has taken serious steps by launching Vision 2020: and advocating training for optometrists and opticians to combat this type of blindness.

#### **Objective of the Course**

To develop skills and knowledge in opticianry for quality vision care services. The broad areas covered are the principles and systems of optical dispensing, optical system and refractive states of the eye,opticianry equipments and instruments, lens and frame purchase and inventory management. At the end of the course the candidate will be able to guide the patients to choose the appropriate lenses for their visual needs, measure the lens power by lensometry, inspect the lens defect, troubleshoot the problematic spectacles and organize the optical service in community outreach programmes.

# Eligibility

Candidates who have completed training in optometry or ophthalmic assistant or with special training in refraction.

No. of Candidates 1-2 per batch

**Duration** 6 Months

**Offered at** Aravind - Madurai

**Contact** Dr. Vijayalakshmi <u>childre</u>neye@aravind.org

### Short Term Training Course for Orthoptist



The Paediatric Opthalmology department at Aravind has now teamed up with ORBIS India (ORBIS, a non aligned, non profit global development organization) to expand dissemination of knowledge and training in paediatric ophthalmology for countries in the developing world. The important

area where the pediatric ophthalmologist needs assistance is estimating the angle of deviation in cases of strabismus, detection of amblyopia and execution of various methods of occlusion in the amblyopic children. "Orthoptics" which is the science dealing with the above is a course offered only in very few institutes in the country which is for 3 years. However there are many candidates getting trained in optometry throughout the country. This course is designed for those optometrists and refractionists who are interested in childhood eye diseases so that they can be of special help to the paediatric ophthalmologist.

This course is divided into three phases in terms of delivering the knowledge; The first phase (6 weeks ) covers Basic Science, Second phase (8 weeks) covers Basic in strabismus management and orthoptic practice and the third phase (10 weeks) covers clinical exposure in orthopic evaluation and management. The main objective of this course is to gain knowledge in the following areas:

- 1. Vision estimation in neonates, infants, toddles and young children, Paediatric refraction and common refractive errors
- 2. Diagnosis of all forms of Strabismus including abnormalities of binocular single vision
- 3. Detection of Amblyogenic factors and amblyopia, in all age groups of Paediatric population and their management
- 4. Familiarity and ease of using various instruments in the department which are used for the above purpose, good communication skills with the child and the parents

# Paramedical Courses - Short Term

#### Eligibility

Minimum 12th standard with 6 months experience as an ophthalmic nurse

No. of Candidates 2-4 per batch

**Duration** 3 Months

Offered at Aravind - Madurai

Contact Dr. Vijayalakshmi childreneye@aravind.org

### Eligibility

Minimum 12th standard with good communication skills in local languages

No. of Candidates 1-2 per batch

**Duration** 2 Months

Offered at Aravind - Madurai

**Contact** Dr. Vijayalakshmi childreneye@aravind.org

# Training Course for Paediatric Nurse



This course is offered by Paediatric Opthalmology Department in collaboration with ORBIS. This course delivers basic knowledge on paediatric ocular illness and treatment type. Training in Paediatric OPD, Ward & handling OP & IP patients and its procedures. Visual acuity measurement in children. Orientation

to paediatric ophthalmic equipment and instrument, its sterilization procedures. Training in operation theatre and recovery room including pre and post anesthesia.

#### Paediatric Counselling



This course is offered by Paediatric Ophthalmology Department collaboration with ORBIS. The aim of the training programme is to develop or train existing personnel to spend more time with the patients / parents than the doctors thereby reducing the anxiety, making them comfortable, raising the satisfaction by

giving more information and awareness about the diseases the child has and motivating them for regular follow-up as advised by the Paediatric Ophthalmologist. This course provides basic knowledge on Paediatric ocular illness, treatment type including follow-up procedures. Need, importance and role of counseling & counselor. Basic counseling skills including communication, listening and empathy etc. Counseling for various eye diseases in children.

#### Paramedical Courses – Short Term

# Eligibility

Postgraduates / Practicing ophthalmologists ophthalmic assistants / Optometrists

**No. of Candidates** 1 per batch

**Duration** 2 Months

Offered at Aravind - Madurai

**Contact** Dr. Kim uma@aravind.org

# Certificate Course In Fundus Fluorescein Angiography And Ultrasonography



Aravind Eye Hospital and Postgraduate Institute of Ophthalmology in collaboration with Technology Information, Forecasting and Assessment Council (TIFAC) - Department of Science and Technology, Government of India, has created TIFAC -CORE (Centre Of Relevance and Excellence) which would move

towards better management of diabetic retinopathy.

TIFAC - CORE would impart training of health care personnel in taking fundus photos, to do fluoresein angiography and perform ultrasonography with the help of state-of-the-art facilities. Due to the fact that very few institutes have facilities to train ophthalmologist/ ophthalmic assistants, this Certificate Course in FFA and USG is being introduced. This center is well equipped with facilities for training.

# **Management Courses**

#### **Target Groups**

Senior level programme staff of Government, NGO and International NGOs in Eye care. Preferably below 50 years

**Duration** Two weeks

No. of Candidates 25 per batch

**Offered at** LAICO – Madurai

Contact Course coordinator courses@aravind.org

# Management Training for Eye Care Programme Managers

All public health interventions ultimately depend on the management



skills of public health workers. The shortage of basic management competencies among today's public health workforce is perhaps the single most important barrier in trying to make lasting improvements in public health throughout the world.

Health initiatives in developing countries often fail not because

of a lack of scientific knowledge but because of a lack of managerial competence.

#### The Course

Considering the burden of increasing blindness, the new initiative, Vision 2020 aims to dramatically increase the volume, quality, and sustainability of eye care services throughout the world. A major challenge is the need to rapidly expand the eye care program in a costeffective manner recognizing that the resources would be limited. For this program management expertise is very essential to make best use of available resources and serve the unmet need. This was reiterated during the South East Asia Regional workshop in September 1999 on Vision 2020.

In the global initiative, Vision 2020 - Right to Sight, the utilization of existing infrastructure is estimated as 25 % and the target is to reach 90% level. This requires a complete re-engineering and a paradigm shift in management and systems in the current programme activities as well as in new projects that will come in to existence. Introducing sound management practices was identified as a priority activity. Although there are institutions that train professionals in management and programme management in general, there is no institute, which provides eye care programme management training on a regular ongoing basis. With a result, many of those now in positions of shaping and managing eye care programmes at Province/State, National or Regional level, are doing so without the formal training resulting in varying levels of effectiveness in the programme. Hence this course is designed to bridge the gap in knowledge and skills about eye care programme management.

#### Management Courses

#### Target Groups

Ophthalmologist heads of eye hospitals and Key Trustees and Senior Management of Eye Hospitals

**Duration** One week

No. of Candidates 25 per batch

**Offered at** LAICO – Madurai

contact Course coordinator courses@aravind.org

### Management Prioities in Eye Care Delivery



### The Course

The commitment to solve the problem of blindness is reflected in the continual establishment of various programs and infrastructure development for the control of blindness. In the global initiative, Vision 2020 - Right to Sight, the utilisation of infra-

structure though highly inadequate is estimated as 25% and the target set is 90% level. Obviously, creation infrastructure and establishment of national or local eye care programs by themselves are not sufficient. We need to develop better resource utilization through improved management system inputs and capabilities both at the institutional and national levels. In a hospital setting it is necessary that the decision maker should bring in management practices that can increase the patient load, improve efficiency, quality and staff motivation.

# **Course Objective**

To provide an overview and appreciation of different principles and practices of management that contributes to more effective and efficient delivery of eye care services.

By the end of the workshop the participants will be able to

- Apply the principles and strategies for increasing the uptake of eye care services
- Understand concepts relating to productivity, planning, scheduling - all of which can contribute to efficient handling of the clinical load and smoother functioning of the hospital.
- Understand the basics of budgeting, cost control and investment decisions
- Understand the need and system that ensure Quality both in the clinical and non-clinical area as well as how they can influence patient satisfaction and eventually the uptake of eye care services
- Develop Information Systems for Monitoring Operational Efficiency, planning & better decision making.
- Apply Human Resource Management Practices that lead to better strategic planning, leadership, developing and maintaining a well motivated team.
- Plan, design & network for comprehensive eye care.

#### **Course Methodology**

Various management concepts will be taught through case studies method supplemented by didactic lectures, reading assignments and exercises. As a teaching approach, the case method represents a simulation of an actual management situation at the point where the decision must be made in response to a particular problem or situation. The skills developed through analysis and discussion of the cases are expected to be relevant to the participants' own environment. As part of the application process, the participants will be required to describe at least one of the problems that they are facing. Some of these may also be used as a case as part of the learning process.

#### **Admission Procedures**

This course is open to all countries in South East Asia Region and African countries. Admission is limited to about 25 participants and will be made on first come basis subject to meeting the above criteria.

#### Target Groups

Managers/Administrators who are responsible for day-to-day administration and management of eye hospitals

Duration Six weeks

No. of Candidates 10 per batch

**Offered at** LAICO – Madurai

**Contact** Course coordinator <u>courses@aravind.org</u>

# Management Training & Systems Development for Hospital Administrators or Managers

### The Course

In the global initiative, Vision 2020 - Right to Sight, the utilization of existing infrastructure is estimated as 25 % and the target set is 90% level. This requires a complete reengineering and a paradigm shift in the way the current facilities work as well as the new projects that will come in to existence. It is conservatively estimated that about 1000 institutions are providing eye care in South East Asia. Many of these hospitals have the potential to significantly enhance their service to the community in terms of volume and quality, by adopting new technologies in management and in clinical services; thereby they can meet the current expectations of the community. This can pave the way for financial viability leading to long-term sustainability. This Shortterm Course on Management of Eye Hospitals is developed to address this opportunity.

#### **Course Objectives**

- Develop skills and competencies for effectively managing an eye hospital.
- Provide basic insights into the various departments to understand the interdisciplinary nature of eye hospital management.

• Develop strategies and action plans for efficient and effective management, specific to participant's organization

#### **Course Content**

- Magnitude of blindness, common eye diseases and VISION 2020
- Management of core process (Outpatients units, Operation Theatre & sterilization & Wards)
- Medical Records Management
- Social marketing, Patient Counselling and Community Outreach
- Financial viability & accounting
- Patient satisfaction and quality management
- Materials management
- Management information systems and computer applications
- Personnel and general office management
- Maintenance and housekeeping management
- Managerial skills

#### Course Methodology

Course methodology includes lectures, practical exposure to Aravind Systems, case discussions and development of specific strategies and action plans for individual participant's organization.

#### Target Groups

District Programme Managers, Senior Ophthalmic Assistants of Government Sector Project Managers, Coordinators of eye care programmes, Senior Ophthalmic Assistants/Optometrists & Mid level eye care professionals, Junior Programme managers, Administrative staff of NGO/ Private Sector

**Duration** Four weeks

# Certificate Course in Project Management for Eye Care

#### The Course

This management training course is designed to enable the participants involved in results-oriented development activities to acquire appropriate knowledge, attitude and skills necessary to manage projects and programmes.

Considering the burden of increasing blindness, the Vision 2020 aims to dramatically increase the volume, quality, and sustainability of eye care services throughout the world. A major challenge is the need to rapidly expand the eye care program in a cost-effective manner recognizing that the resources would be limited. For this program management expertise is very essential to make best use of available resources and serve the unmet need. This was reiterated during the South East Asia Regional workshop in September 1999 on Vision 2020. In the global initiative, Vision 2020 - Right to Sight, the utilization of existing infrastructure is estimated as 25% and the target is to reach 90% level. This requires a complete re-engineering and a

### Management Courses

# No. of Candidates 20 per batch

**Offered at** LAICO – Madurai

**Contact** Course coordinator <u>courses@aravind.org</u> paradigm shift in management and systems in the current programme activities as well as in new projects that will come in to existence. Introducing sound management practices was identified as a priority activity.

This training is designed for professionals concerned with eye care programme development, planning, implementation, monitoring, evaluation and funding. It will be of specific interest to the following groups:

#### The aim of this course is to help the candidates to

- Learn to assess the magnitude of the problem and its implications
- Understand the gaps in service levels and issues relating to requirement and actual availability of resources
- Understand factors and challenges specific to eye care in programme development
- Internalize the core concepts and strategies in the design and delivery eye care services.
- Gain knowledge and skills on planning and prioritizing for the eye care programmes and services including evidence based decision making
- Develop an understanding of various monitoring and evaluation methods/processes
- Gain knowledge and skills on grant monitoring and financial management
- · Learn about managing change and solving problems
- Appreciate the role of networking and alliances for a greater impact

# **Course Topics**

- Magnitude of Global Blindness and the Indian Situation
- Vision 2020: The Right to Sight
- Strategies for control of common eye conditions
- Community Eye Health
- Project planning& Development
- Project Implementation
- Project monitoring & evaluation
- Financial Management and financial sustainability of eye care programmes
- Managerial Skills
- International NGOs in eye care
- Quality Assurance in Eye Care
- Human Resource Management

#### **Eligibility** Any Graduate

No. of Candidates

15 per batch

**Duration** 6 Months (June-Nov.)

**Frequency** Once a Year

**Offered at** LAICO - Madurai

**Contact** Course Coordinator course@aravind.org

# Certificate Course in Eye Hospital Operations Background of the Course

The course is designed to provide knowledge and skills in functional areas of eye hospitals both in terms of the management and clinical areas. The students will be trained to coordinate the day-to-day patient care activities and provide support to the clinical and other administrative team. In the global initiative, Vision 2020 – Right to Sight, the utilization of existing infrastructure is estimated as 25 % and the target set is 90% level. This requires a complete reengineering and a paradigm shift in the way the current facilities work as well as the new projects that will come in to existence. By adopting new technologies in management they can pave the way for financial viability leading to long-term sustainability. The Certificate Course in Eye Hospital Operations is developed to address this opportunity.

#### **Objective**

To develop trained mid-level management professionals in order to meet the requirements of various areas in Aravind Eye Care System.

# **Target Group**

This program is designed for those who are responsible for the day-today administration and management of an eye hospital. This course would be relevant to both fresh graduates and those already working in the Aravind Eye Care System. The candidate must have working knowledge in Basic English, which will be the medium of instruction.

#### **Training Objectives**

This course will enhance the skills and knowledge of the participants in specific areas of managing the day-to-day operation of an eye hospital, which will be the outcome as listed below:

The overall aim is to develop skills and competencies for effectively managing an eye hospital and provide basic insights into functions of various departments by understanding the interdisciplinary nature of Eye Hospital Management.

#### **Duration** One year

**No. of Candidates** Per batch: 5-8

**Offered** at LAICO

**Contact** sanil@aravind.org

# Fellowship in Eye Hospital Management

Rationale



Vision 2020 aims to dramatically increase the volume, quality, and sustainability of eye care services throughout the world. A major challenge is the need to rapidly expand program management expertise to make best use of available resources and reach maximum people in need.

The Aravind Eye Care System (AECS) is committed to the elimination of needless blindness with a global perspective. It has been successful in providing high quality eye care in large numbers through enhanced efficiency brought about by systematizing & streamlining the activities in the management as well as clinical areas. The system continues to work efficiently because of the vision and commitment of the leadership team. Day by day the organization is growing and becomes more and more complex in each and every areas of its operation. Presently the organization is partnering with nearly 180 hospitals all over the world through training and consultancy for capacity building so that more people can be served. To reach and serve a greater number of people the new direction is to take on the management of other eye hospitals on a turn key basis. This external opportunity again offers an exciting challenge and a great growth potential. Thus there is need to have trained & skilled management professionals who can independently manage and run departments or functional areas within AECS or partnering eye hospitals along the lines of Aravind. And the belief is that appropriate training is required at all levels to work as a cohesive team towards the achievement of the organization's mission.

#### Target Group

This training is thus designed for those with post graduation in hospital/health management or allied disciplines with exposure to health care. The candidates are selected with an intention to be trained as efficient eye hospital managers for the Aravind Eye Care System.

#### **Training Objectives**

The overall aim is to develop skills and competencies for effectively managing an eye hospital along the lines of Aravind and provide basic insights into functions of various departments by understanding the interdisciplinary nature of Eye Hospital Administration.

At the end of the course the participants will be able to

#### Enhance Skills to

- Ensure smooth functioning of core process (OPD, Ward and OT) by patient load management, forecasting, streamlining patient flow, staff scheduling, supplies planning, space planning, facilities planning, maintenance etc.
- Promote patient centered care with a continuous quality improvement orientation
- Develop appropriate strategies to attract patients of different economic background, which has an implication on the number of patients served and revenue generation
- Develop systems to effectively utilise the available resources
- Develop and apply various systems required for effective functioning of different administrative activities and support services in a hospital
- Improve inter-personal skills to become an effective manager

#### Have the Knowledge to

- Understand the need and importance of cost effective and sustainable eye care through high volume and enhanced quality
- Understand the magnitude of blindness, common eye diseases, equipment and instruments in eye care and basics of community eye health
- Use computers and appreciate the use of computers in the hospital

# **Task Oriented Training Courses**

As we develop a deeper understanding of the various tasks that lead to better eye care services, the need for training in such tasks becomes evident. Since needs for such training increased, we moved from offering training in an ad-hoc or a custom-designed manner to a structured pattern. Currently several such training courses are offered. Two such training courses offered in a structured manner are:

- 1. Instruments Maintenance (Six weeks) for technicians
- 2. Instruments Maintenance (five days) for doctors

#### Eligibility

These courses are intended to be as continuing education for employees of eye care programmes. Hence there are no strict eligibility criteria. Candidates must be deputed by the organisation concerned. Candidates are admitted on the basis of the dates of application.

#### Eligibility

Sponsored candidates from eye hospitals, technicians from organisations engaged in sales and service of ophthalmic instruments.

**Duration** Six weeks

No. of Candidates Six per Course

**Offered at** LAICO – Madurai

**Contact** Course coordinator <u>courses@aravind.org</u>

#### Course on Instruments Maintenance - Technician's Course

#### **Course Description**

The course trains participants in maintenance of common clinical and surgical ophthalmic equipment. Participants acquire technical know-how through intensive hands-on learning experience. At the end of the



course participants will be equipped with

- General Maintenance Skills including troubleshooting, repairing equipment and planning for maintenance activity in the hospital or in an eye-camp site, away from the hospital.
- Skills relating to maintenance of electrical and electronic instruments including using a multimeter, calculating power ratings and locating electrical faults and rectifying them.
- Skills relating to maintenance of optical instruments including cleaning optical surfaces, dismantling and cleaning ophthalmoscopes, retinoscopes and slit lamps and carrying out preventive maintenance of instruments.
- Skills relating to maintenance of mechanical parts of equipment including locating and rectifying faults in castor wheels and table tops of slit lamps, lubricating necessary parts, sharpening instruments and checking leaks.
- Relevant knowledge of the eye and its parts, common refraction defects, eye diseases and principles of ophthalmic instrumentation.
- Organisational skills including listing, tracking and cataloging all hospital equipment and their repairs.

#### Task Oriented Training Courses

## Eligibility

Ophthalmologists

Duration 5 DAYS

#### Frequency

Depending on the need and the request from the Ophthalmologist / from hospitals.

#### Course in Instruments Maintenance -Doctor's Course



This is a five day course designed to familiarize doctors on some of the maintenance problems relating to Ophthalmic Instruments. The dates can be arranged to suit the convenience of the doctors. Doctors who attend other courses in Aravind may choose to spend the extra five

days before the commencement of their course or after their course is over to undergo the course.

#### **Course Content**

The content of the course includes proper use of equipment, general maintenance, maintenance of electrical and electronic instruments, Maintenance of optical instruments, maintenance of mechanical parts of equipment.

#### Eligibility

Those who work as a camp organizer, project manager, outreach coordinator, programme coordinator, social worker, counsellor, ophthalmic assistant.

#### Duration

Four weeks 15th of June and December each year

#### **No. of Candidates** 10 per course

**Offered at** LAICO – Madurai

# Training in Community Outreach and Social Marketing of Eye Care Services

#### **Course Description**

The course imparts knowledge and skills in community eye care management by partnering with the community resourses to enhance the volume and utilisation of eye care services

#### **Course Contents**

- Estimate the magnitude of blindness, annual workload and unmet need in your service area
- Plan for your service area and develop strategies and action plans to achieve the goal
- Manage community outreach activities efficiently
- Understand the barriers to acceptance of cataract surgery treatment by the masses
- Know the importance of health communication and behavior change for tackling the barriers to service utilization
- How counselling helps to cope with the large volume
- Apply the concept of social marketing in eye care service delivery

- · How Aravind has succeeded in its outreach activities
- Broaden your knowledge on associated programmes like CBR, school eye health programme, village volunteers programmes etc.
- Importance of community participation in eye care services
- Help you in solving problems specific to your hospital to improve eye care services

Lectures, exercises and hospital postings will provide a theoretical foundation for the course. Participants will have to interact with medical personnel, staff of Aravind's outreach department, camp sponsors, village volunteers, patients, and social workers. Later they will be provided opportunities for field visits along with Aravind camp organizers and medical team. Participants are required to maintain a log book for day-to-day lectures and observations.

#### Evaluation

There is no formal evaluation of the trainees at the end of the course. However, participants are informally evaluated everyday and this progress is conveyed to them during weekly review sessions. Towards the end of the training, participants are required to prepare a detailed strategy for initiating and implementing community outreach activities in their hospital. This is formally presented to a panel of senior Aravind Staff who help in refining the plan. Trainees are issued a certificate on successful completion of the course.

In addition, two other courses in patient counselling and general orientation to hospital management are to be offered shortly.

#### Eligibility

Any undergraduate with 2 years experience in community work.

**Duration** 2 months

#### Certificate Course on Community Outreach Paediatric Eye Care Services

#### **Course Content**

The content of the course includes Introduction to Community outreach in eye care. Epidemiology of eye diseases, workload estimation, Planning & organizing community outreach programs. Information, education and communication & community rapport building. Visual acuity measurement, Anterior Segment examination in children, Paediatric eye care service delivery models including school eye health program. Basic Requirements for anesthesia.

## **Custom Designed Courses**

In addition to the structured short term and long term courses described earlier, Aravind and LAICO also offer learning opportunities to meet with the specific needs of individuals and organisations. Such training is offered throughout the year and the actual scheduling is based on mutual convenience. These requests often take the form of observation, some hands-on training and spending time in specific clinical or administrative areas. The duration of such learning, actual dates and costs (if any) vary from one request to another. The broad areas where such learning opportunities are often requested and provided are:

#### A. Clinical Areas

- Operation Theatre Management
- Ward and Out-patient Management
- Observing Specific Surgical and Laser Procedures
- Observing and learning advanced diagnostic procedures like field analyser, corneal topography, ultrasound scan, etc.
- Short-term exposures to specific aspects in specialty areas like Retina, Glaucoma, Pediatric Ophthalmology, Cornea, etc.

#### **B.** Non-clinical Areas

- Eye Hospital Administration
- Medical Records
- Purchase and Inventory Management
- Accounting and Financial Management
- Housekeeping Maintenance Management
- Use of Computers in Hospitals
- Advice on Specific Capital and Equipment Purchase
- Advice on Architectural design for Expansion
- Inputs on Planning a New Hospital Project
- Developing Training Activities
- Assistance in carrying Out Surveys
- Dispensing Spectacles (surfacing, edging, fitting and counter sales)

# **Continuing Medical Education Programmes**



Several times a year, Aravind-Madurai, Tirunelveli and Coimbatore arrange Continuing Medical Education programmes (CME) for ophthalmologists from all over the country and abroad. Eminent faculty from India and abroad conduct

these seminars, workshops and clinical/surgical demonstrations.

#### Short Courses and Workshops

Throughout the year, several short courses and workshops are organised, both on the clinical and management side. Such clinical courses are usually of two days duration while the management or non-clinical courses are spread over one week. Information on these courses are sent to institutions and individuals two to three months in advance. These courses are designed as an update on knowledge and skills, to enable professionals keep in touch with latest developments.

#### Update in Ophthalmology for Postgraduate Students

Aravind-Madurai conducts an ophthalmology update for exam-going postgraduates (DO, MS, Dip.NB, MRCO). Candidates from government and other private institutions in the country are eligible for this course. It provides an update in theory, diagnostic aids and clinical management. Model examinations focusing on case discussions, case presentations and clinical examinations enable candidates to face their forthcoming examinations with confidence.

The course is conducted twice a year during the first week of January and July.

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The information in this booklet is intended to provide an overview of the education programmes at Aravind Eye Hospitals & Postgraduate Institute of Ophthalmology and Lions Aravind Institute of Community Ophthalmology. For further details on any of the courses please write to:

#### THE COURSE COORDINATOR

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