

# Certificate Course in Fundus Fluorescein Angiography and Ultrasonography



**TIFAC-CORE**



(TECHNOLOGY INFORMATION, FORECASTING & ASSESSMENT COUNCIL  
CENTRE OF RELEVANCE AND EXCELLENCE)  
**IN DIABETIC RETINOPATHY**

ARAVIND EYE HOSPITAL-MADURAI



ARAVIND EYE CARE SYSTEM

## Introduction

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. This centre imparts high quality education and training and State-of-the-art facilities for research in the areas of diabetic retinopathy and provides leadership, faculty and infrastructure facilities coupled with training and academic expertise. This TIFAC-CORE is mandated to develop into an international centre of excellence in research, training and develop changes in treatment patterns to prevent blindness due to diabetic retinopathy.

## Need and importance of the training

Diabetic retinopathy is one of the foremost causes of blindness in the developing countries. In India, it was the seventeenth cause of blindness twenty years ago. But today the diabetes related blindness has rapidly ascended to the Sixth position.

WHO states that 2% of Indians are diabetic and has projected 57.5 million diabetic patients by 2025. However, recent studies done in India report that it is between 5-10%. Around a quarter of these diabetics will be affected by diabetic retinopathy. A complication of diabetes that affects the retina in the eye. Half of them will need intensive follow-up, laser treatment, vitreous surgery and low vision aid rehabilitation. Early detection and timely treatment of diabetes can substantially reduce the risk of vision loss or blindness from diabetic eye disease. In addition trained manpower to treat diabetic retinopathy is also very less and it is impossible to screen the ever increasing population of patients with diabetic retinopathy.

It is thus necessary that we train and create a cadre of trained optometrists and ophthalmic photographers to help in the screening. TIFAC-CORE would impart training of health care personnel in taking fundus photos, to do fluorescein 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.

## Relevance of the Course

- A. Fundus photography and fluorescein angiography are extremely valuable techniques for understanding pathoanatomy and pathophysiology of various conditions and have aided the diagnosis and monitoring of the treatment of retinal vascular and macular diseases. It is used as a guide for laser treatment of retinal vascular disorders.
- B. In recent years, ophthalmic ultrasound has become an indispensable diagnostic tool that has increased our ability to detect and differentiate many ocular and orbital disorders. This painless, non-invasive, dynamic examination can be performed in the clinic at the patient's bedside or in the operating room. The accumulation of vast examination data and recent advances in technology now allow accurate diagnostic evaluations, thus making ultrasound an essential component of the clinical practice of ophthalmology.

## The centre is well equipped with facilities for training

- Fundus camera with digital image archiving system for FFA & ICG
- USG scan system which consists of an attached computer. It includes a focused B-scan / 3D scan probe. The 3 screen (slicer) gives information about volume scans.

Aravind being recognised as one of the world's most comprehensive promotive centre of eye care handles the largest patient volume in the world. It has developed unique service delivery models which is accepted worldwide.

## Course / module content

1. Lecture schedules on indications, technique of performing Fundus Fluorescein Angiography (FFA), its complications and interpretations
2. Lectures on Basics of Ultrasonography (USG), technique of performing USG
3. Hands on training in performing FFA
4. Hands on training in performing USG

## Target participants

1. Postgraduates / practicing ophthalmologists
2. Ophthalmic assistants
3. Optometrists

## Expected outcomes

- After the completion of this course the candidate will be able to
- Perform FFA independently
- Perform Ocular & Orbital ultrasonography and interpret.

## Course duration : 2 months

## Recruitment and selection

The course is open to ophthalmic assistant, optometrist and postgraduates. One candidate will be admitted each month to this course. Candidates from other developing countries are also eligible. The candidates should apply in the prescribed application form and will be admitted after scrutinizing their credentials and certificates. The curriculum provides extensive hands-on experience supplemented by live demonstration and lecture classes.

## Course fee

Rs.10,000/- (for India & Nepal candidates)

US\$ 500/- (for International participants), (18% GST is applicable to the course fee)

## Accommodation Tariff

Accommodation will be provided for the selected candidates at Inspiration (Trainee Hostel). Please click here to view the information about tariff and other details of [inspiration](#).

## Food

Food is served at the hostel itself and includes break-fast, lunch and dinner (local Indian menu). On Sundays, only breakfast will be provided. However there are number of good restaurants located within walking distance. Food expenses are separate and can be paid at the Inspiration mess on a monthly basis.

## For further details, Contact

Dr. R. Kim

CORE Faculty

TIFAC-CORE in Diabetic Retinopathy

Aravind Eye Hospital

1, Anna Nagar, Madurai - 625 020, Tamil Nadu, India

Phone: 0452-4356100; Fax : 91-0452-2530 984

E-mail : [kim@aravind.org](mailto:kim@aravind.org) ; [uma@aravind.org](mailto:uma@aravind.org)

Website : [www.aravind.org](http://www.aravind.org)