

## **PROJECT PROPOSAL FOR A SCHOOL OF DISPENSING**

### **Introduction:**

**Medical Research Foundation** (MRF) is a globally recognized quality leader in tertiary eye care and teaching / training in Ophthalmology and Allied Subjects. It is an internationally recognized academic institution, conducting Graduate, Postgraduate, Research, Fellowship and Continuing Medical Education Programs.

In the field of Optometry, Medical Research Foundation is a pioneer. The first 4 year degree program in Optometry – the Elite School of Optometry - was started in 1985. Understanding the need for well trained primary eye care professionals in India, Dr. S. S. Badrinath, Chairman, Medical Research Foundation and Prof. Jay M. Enoch, Professor Emeritus, School of Optometry, University of California, Berkeley, decided to start the Elite School of Optometry.

The need today is a well defined and structured program that will impart the knowledge of Scientific Dispensing. Sankara Nethralaya (a Unit of Medical Research Foundation) has always been interested in ensuring that they patient receive scientifically dispensed spectacles. Initially for two and half years, the optical service at Sankara Nethralaya was run with the help of GKB opticals, Kolkata. For the last 3 years, Sankara Nethralaya has partnered Essilor to bring quality ophthalmic lenses to the patients.

### **The Program:**

The School of Dispensing will be the first 4 year degree program in India. All efforts would be made to start the program in collaboration with a prestigious university in India. Students who have completed the Higher Secondary Education (10 + 2) with Physics, Chemistry, Mathematics and Biology will be considered for selection. The program will begin on September 2006 parallel to the BS Optometry and BS Ophthalmic Assistant Courses. The objective of the program is to create a pool of scientifically trained ophthalmic dispensing personnel

### **Infrastructure:**

Established teachers at the Elite School of Optometry (ESO) will teach at the school of dispensing. Essilor has already helped in getting one of the executives of MRF trained at the Varilux University, Paris. The school will have the full backing of Medical Research Foundation. It is intended that a new building for the school of dispensing will be established in 3 years time at 8, GST Road, St. Thomas Mount, the same campus as ESO.

A lens lab which will have a manual edger, a pattern edger and a patternless edger will be provided for the students. Students will learn the basics of lens making in this lab. This lab will also have lensometers on which students will be

taught. A frames lab will be established. In this lab, students will be taught how to make simple frames using cellulose acetate sheets and other materials. The students will have access to the existing library at the Elite School of Optometry. The library will be expanded to include more books and journals on Ophthalmic Dispensing.

### **Course Curriculum:**

The course curriculum can be broadly classified into Basic Science and Optics, Management and Communication.

The courses under the above categories would be:

**A: Basic Science and Optics:** Introduction to Human Anatomy & Physiology, Basic Mathematics, Mathematical Methods in Optics, Physical optics – Reflection, Refraction, Diffraction, Absorption, Scattering, Transmission, Polarization, Geometrical Optics – Wave nature of light, Lens shapes, Vergences, Conversion factors, definition of a dioptre, prism dioptre, Prentice's law, deviations, ophthalmic prisms, aberrations, Physical and Optical characteristics of ophthalmic lenses: ophthalmic prisms and prismatic effects of lenses, Physical characteristic and compatibility of ophthalmic materials, Spherical Lenses-Lateral movement, Neutralisation, Surface power and form, Identification and Marking lenses, Astigmatic Lenses – Cylindrical Lenses; Rotation test. Crossed cylinders; Sphero-cylindrical lenses, Transposition, Toric lenses – Transposition and Identification Axis Direction and Rotation, Ophthalmic prisms and prismatic effects. Decentration, laying-off; Decentration of spheres, cylinder and sphero-cylinders. Differential prismatic effects, Optics and design of bifocal and multifocal lenses, Progressive Lenses; designs and characteristics, Lens styles and patient needs, Boxing system, Frame Alignment, and basic adjusting, Optical Instrument and Aberrations, Industrial Eye protection and illuminations

### **B: Management**

- Introduction to Information Technology, Introduction to Business Law, Accounting in Business Environment, Microeconomics, Principles of Marketing, Managing corporate Finance, Managerial Economics, Business Information System in Organisation, Managerial Economics

### **C: Communication**

- Human resources; An Introduction, Managing people, Communication

The Project cost is estimated to be 2.31 Crores.