

# Optometry study tour to South India

Jon Baines Tours is a London based tour operation that specialises in specialist medical study tours exploring each destination through the prism of a particular profession, in the company of like-minded health care professionals. Visits range from prestigious institutions to small local polyclinics and practitioners in rural communities, highlighting all aspects of a particular profession in a chosen destination. Each tour also

includes a full cultural programme so that participants experience a balanced insight into the country they are visiting. Each year there is a separate study tour for ophthalmologists and optometrists. The destination for this year's optometry tour was South India and Pukekohe optometrist John Kelsey savoured the delights of this rich cultural destination. Here he writes about some of the highlights.

In March I joined a group of optometrists and partners from England, Australia and Ireland. It was a great chance to hear everyone's experiences of the changes taking place in optometry. The UK optometrists were very envious of the very cooperative working relationship between optometry and ophthalmology in NZ, and that optometry in NZ is essentially private with little government interference.

The tour started in Chennai, the capital of Tamil Nadu. It took a few days to become accustomed to the 35c heat, litter and sheer population density, but the very friendly nature of the local people made one feel very welcome. We visited a local school and the stunning World Heritage Temples cut from solid stone at Mahabalipuram.

Our first optometry visit was to the Elite School of Optometry in Chennai, which was the first institution in India to offer a degree course. India has 89 institutions teaching optometry, currently there is no central registration board for optometry. We met the students and teaching staff who discussed the current state of optometry in India, especially in reference to

providing eye care to poorer rural populations. They recently screened 20,000 school children in one day.

The gap between the rich and poor of India is extreme with many rural labourers earning NZ\$4 a day, while a software engineer in Bangalore can earn 40 times more. India has 55 US\$ billionaires, over 100 million of the 1.2 billion population are now regarded as middle class. The government subsidises basic commodities like rice and cooking oil to assist low wage earners. Explosive GDP growth averaging over 8% a year is transforming the Indian economy with increased urbanisation and consumerism changing social structures that have been in existence for over 1,000 years.

We visited the Essilor headquarters in Bangalore, India's silicon valley and call centre hub. India currently has 22,000 optical outlets most of which are small independents but multiples including Zeiss branded practices are quickly becoming more dominant. Most lenses are still glass but the market is rapidly changing to resin.

After visiting the beautiful Mysore Palace we travelled through a wildlife sanctuary with elephants and monkeys,

on to the hill station town of Ooty. We went to see a community vision screening day where a local private hospital provided cataract operations at no cost to the poor. A visit to the Ayurvedic Eye hospital showed a wide range of non-surgical naturopathic therapies for all eye conditions, including cataracts and glaucoma. The 300 inpatients stay for a minimum 20 days.

We then travelled by train through stunning tropical landscapes to the former Portuguese town of Kochi in Kerala where 23% of the local population are christian. Many of the old churches from the days of the European spice trade were still in use and in great condition. The degree of religious diversity and tolerance which is enshrined in Indian law and custom, is one of the most striking features of a visit to India.

Our trip ended with a cruise through the backwaters. The tour was a great mix of sightseeing and education and with the fantastic South Indian food it made for a memorably trip.

Vietnam is the destination for the 2012 study tour for optometrists and will be led by David Shannon, currently the chair of the British Association of Optometrists. An ophthalmology study tour is destined for Cuba in February 2012. For further information please refer to details left or contact Jon Baines in Melbourne on 0061 3 9343 6376, [info@jonbainestours.com.au](mailto:info@jonbainestours.com.au) or [www.jonbainestours.com](http://www.jonbainestours.com)



John Kelsey at one of India's many tea plantations



The participants on this year's trip to South India



Testing at the community vision screening day



A cataract patient receiving free care at the community vision screening days



The local optometry practice at Ooty



One of the temples at Mahabalipuram

## OPHTHALMOLOGY STUDY TOUR TO CUBA

22 February - 5 March 2012

[www.jonbainestours.co.uk/ophthal](http://www.jonbainestours.co.uk/ophthal)

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## London Eye Hospital performs first bifocal LAL eye surgery

The London Eye Hospital recently completed the world's first bifocal Light Adjustable Lens (LAL) eye surgery, apart from clinical trials.

Typically used during cataract or clear lens extraction surgery, LALs are the only lenses that can be adjusted after they're implanted in the eye. The new bifocal LALs consist of unique materials called 'macromers' which were developed in the USA by a team of Nobel Prize winning scientists. The technology, which is available in Europe but not in the United States, allows surgeons to fine tune the prescription for the patient by adjusting the power the IOL postoperatively through the application of ultraviolet light. Both long and short sight can be corrected permanently on each bifocal lens.

The procedure was performed by Dr Bobby Qureshi, BSc, MBBS, FRCS, consultant ophthalmic surgeon and medical director at the London Eye Hospital.

"Because these new bifocal LALs make use of the latest nanotechnology at a molecular level, they truly represent a whole new level in lens implant technology," said Dr Qureshi. "Before, a single LAL could be adjusted to

improve either short or long distance, but this new bifocal LAL can actually provide both – in a single lens – offering high-definition near and far vision."

The digital adjustments made possible with a bifocal LAL are carried out by a computer-controlled, low-intensity beam of light, and thus do not carry the risks and complications normally associated with surgery, according to the London Eye Hospital. Unlike other surgical techniques available for correcting reading vision, the LAL can be adjusted multiple times without surgery to give the optimal result for each individual eye throughout a patient's lifespan.

Any residual long sight, short sight or astigmatism information is entered into the digital light delivery device and is used to create an adjustment profile which may include an optimised wavefront adjustment also. This adjustment which takes less than two minutes usually, modifies the strength of the lens to add or subtract spherical power, eliminate astigmatic error, or add multifocality to achieve the best vision possible at all distances. ①

## Seeing through the eyes of the colourblind

Unique colour filter glasses which allow those with normal vision to experience colourblindness have received a coveted Japanese government award.

The glasses which enable an understanding of problems arising for people with colour vision deficiency have been designed by Shigeki Nakauchi of the Department of Computer Science and Engineering at Toyohashi University of Technology. The award is for the 'development of a filter to understand what the world looks like to colour deficient people for use in Colour Universal Design (CUD)'. His invention makes a significant contribution to the familiarisation and promotion of CUD by enabling all to experience the diversity of colour vision, and to realise problematic colour combinations.

Five percent of Japanese men and 200 million people worldwide are colourblind and have difficulty in distinguishing specific colour combinations. In order that the colourblind and others with normal colour vision do not confuse colours, there is an urgent need for CUD. However, people with normal vision and who are not colour blind do not have an intuitive understanding of the difficulties posed by colourblindness, a situation that presents a barrier to familiarising and promoting the CUD concept.

Using this filter, which comes in both eye



Colour filter glasses

glasses and glass loupes, non-colourblind people can experience the perceptual colour confusion experienced by the colourblind due to the lack of one type of cone photoreceptor out of the three that support colour vision. Currently the filter is being widely used for colour combination tests in industry and in public facilities for printing material, public signs and textbooks. ①