

## Optometry DisList

Instance 2015: 12

Wednesday, 22 July 2015

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- Actress Lakshmi Manchu Walks in the Dark to eradicate 'preventable' blindness (Video)

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### Today's Messages:

Date: Tuesday, 30 June 2015

From: Hima Bindu ([bindureddy811@gmail.com](mailto:bindureddy811@gmail.com))

Subject: **Could a 3D Printer Make a Human Eye?**

A design company named MHOX estimates its EYE 3D bioprinted sight augmentation products, called Eye Heal, Eye Enhance and Eye Advance, will be on the market in 2027. MHOX says that it's possible to print organic body parts that function as well as or even better than our natural ones, and that includes the eye.

The eyes would be bioprinted with a needle that drops cells that then clump together. Various bio-inks would be used to re-create differentiation of various eye tissues that have different functions.

MHOX imagines that a wi-fi gland and a filter gland could improve and record images your eye sees, so you could share your visual experiences with other people.

The company also projects that eyesight could be improved up to 15/10 — far sharper vision than our current standard of 20/20 — with a "hyper-retina." Eye functionality could be improved as well, to treat eye injuries and even cure eye diseases.

The envisioned process includes a surgical procedure to install the Deck, "the technology that actually connects the eye to the brain," according to MHOX's website, after the natural eye is removed. Then users could interchange their own augmented eyes without surgery.

Article source <http://www.allaboutvision.com/conditions/eye-news.htm>

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Date: Friday, 3, July 2015

From: Arpita ([arpitanikita3@gmail.com](mailto:arpitanikita3@gmail.com))

Subject: **First Canadian gene therapy trial for blindness sees positive results**

EDMONTON – The first four patients in Canada’s only gene therapy trial for blindness say their vision has improved. All four of the Edmonton-area men have choroideremia, an inherited disorder that usually leads to legal blindness by the age of 40.

Ken Ross, 43, underwent the procedure on his right eye on May 25, after what he describes as decades of “looking through a pinhole.” He says when doctors removed the bandage two days later the room seemed instantly brighter. And the view outside was better than ever.

“You can actually see the different colours, especially in the flowers and grass,” says Ross, smiling.

Ocular gene therapy involves replacing the patient’s faulty gene with a functional copy of it. The new gene is carried inside a harmless virus, and injected to the back of the eye. That’s where the virus injects its DNA into the retinal cells, causing them to produce the protein needed for a healthy retina.

“To date, we’ve been told by the patients that they actually see sharper, using the eye that’s been treated,” says MacDonald, an ophthalmologist with Alberta Health Services.

“They can see colours more vividly. The world is brighter to them.”

The team’s genetic counsellor, Stephanie Chan, says choroideremia affects about one in every 50,000 people, about 90 per cent of whom are men. Patients have been asking for gene therapy for years.

“They start thinking about all the things that they might be missing out on in the future,” explains Chan. “If they have families, they might not be able to see their loved ones anymore.”

The Edmonton study was phase one of a clinical trial to prove the technique is safe, the third study of its kind in the world. Gene therapy also has potential to treat age-related macular denegeration, retinitis pigmentosa and Usher syndrome.

For full Article please visit: <http://globalnews.ca/news/2084258/first-canadian-gene-therapy-trial-for-blindness-sees-positive-results/>

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Date: Saturday, 11 July 2015

From: Abhishek Kalbarga ([abhishek.kalbarga@indiavisioninstitute.org](mailto:abhishek.kalbarga@indiavisioninstitute.org))

Subject: **Lack of time spent outdoors, more time using tablets blamed for increase in children's eye problems**

Excessive use of electronic devices and a lack of time outdoors are two factors being blamed for an alarming increase in eye problems in children.

Professor Brien Holden, from the Brien Holden Vision Institute at the University of NSW, warned short-sightedness, or myopia, should not be underestimated.

"Putting your four-year-old in front of an iPad or other tablet device for four hours a day is a big issue in promotion of myopia, and we need to cut out as far as possible unnecessary almost recreational use of tablets," he said.

Figures also showed the number of Australian teenagers with myopia had doubled over the past 15 years.

"I don't want to be an alarmist but the fact of the matter is if we ignore our children becoming short-sighted, and increasing rapidly, they are at risk for future life," Professor Holden said.

The World Health Organisation (WHO) enlisted Professor Holden's institute to help mount an international campaign to raise awareness and to identify further areas of research.

The WHO is expected to release a report on the issue in the next month.

"So 15 years ago, myopia in children, say 17 years of age in Australia, was of the order of around 20 per cent incidence," Professor Holden said.

"It's now around 30 per cent, and this is world-wide trend.

"In Asia, for example, 96.5 per cent of Taiwanese boys aged 19 going into the army are short-sighted.

"And more than half of Asia is already short-sighted, and what we're seeing is a trend towards both greater prevalence of myopia and much higher levels of myopia.

"And by 2050, more than half the world's population will be myopic and there will be about a billion people who are highly short-sighted.

"So vision is blurred and it can be very long and very blue and that of course makes it very difficult for children to see, to learn, people to work, older people to survive."

Time outdoors helps decrease risk and progress of myopia. While devices can be educators, and sometimes babysitters, parents are urged to limit the time kids spend staring at a screen.

Conversely, time spent playing outside is credited with decreasing the risk and progression of myopia.

Taiwan has moved to ban screen time for under-tuos and restrict the time on devices for children up to the age of 18. "Now that's being very controversial and whether they can actually police that or not, there is such a concern about the damage being done to eyes long term or high levels of myopia," Professor Holden said.

"The governments need advice, they need evidence as to what works and doesn't."

<http://www.abc.net.au/news/2015-07-10/lack-time-outdoors-more-ipad-blamed-childrens-eye-problems/6594522>

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Date: Tuesday, 12 July 2015

From: Mounika V ([mounikav30@gmail.com](mailto:mounikav30@gmail.com))

Subject: **Calcium Supplements Associated with Increased Prevalence of AMD**

A new study suggests taking too much supplementary calcium, especially for older patients, could increase the odds of a diagnosis of age-related macular degeneration (AMD).

Researchers from the University of California, San Francisco, (UCSF) evaluated 3,191 study participants older than 40 years for the presence of AMD by fundus photography and interviewed them about dietary supplement intake. The results revealed those who reported consuming more than 800mg of supplementary calcium a day were 85% more likely to be diagnosed with AMD than those who did not report taking a calcium supplement. The researchers note in the study that 800mg is below the recommended total daily intake of calcium for men and women in the United States.

The mean age of those diagnosed with AMD was 67.2, while the mean age for those without AMD was 55.8—leading investigators to speculate that the stronger association in older participants may be due to the longer duration of calcium supplementation or the greater tendency for calcium to cause harm in terms of AMD risk in patients more advanced in age.

“Further longitudinal analyses are needed to understand the relationship between the incidence of AMD and varying levels of calcium intake,” Ms. Kakigi says. “However, this study supports the general idea that physicians should refrain from recommending high levels of calcium to patients who are at high risk for AMD and otherwise have no medical indication for calcium supplementation.

For full article, please visit:

<http://www.reviewofoptometry.com/content/d/retina/c/55095/>

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Date: Wednesday, 15 July 2015

From: Apoorva Chauhan ([apoorva.chauhan@indiavisioninstitute.org](mailto:apoorva.chauhan@indiavisioninstitute.org))

Subject: **SC directs Tamil Nadu Govt to pay Rs 1.72 cr compensation to girl who lost vision**

New Delhi: Supreme Court on Thursday directed Tamil Nadu government to pay a whopping Rs 1.72 crore as compensation and reimbursement of medical expenses to a girl who lost her vision due to negligence at a government hospital.

The girl had lost her vision due to the negligence during retinopathy of prematurity (ROP) surgery at a government hospital in Chennai in 1996. ROP is a potentially blinding eye disorder that primarily affects premature infants weighing around one kg.

The bench directed that Rs 1.3 crore would be paid as compensation and Rs 42.8 lakh would be towards reimbursement of medical expense.

The Supreme Court enhanced the compensation of Rs five lakh awarded by the National Consumer Disputes Redressal Commission.

Krishnakumar's wife Laxmi was admitted in Government Hospital for Women and Children at Egmore in Chennai on August 30, 1996 and gave birth to a premature girl child, who was placed in an incubator in intensive care unit for 25 days until discharged on September 23, 1996.

It was alleged that the hospital authorities did not alert the parents about the consequences of administering "supplemental oxygen, blood transfusion" that she was prone to "retinal detachment".

The hospital also did not inform the parents that they needed to show their daughter to an ophthalmologist and never recommended about the risk of ROP.

Article source: <http://www.firstpost.com/india/medical-negligence-sc-directs-tamil-nadu-govt-pay-rs-1-72-cr-compensation-girl-lost-vision-2322676.html>

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Date: Tuesday, 21 July 2015

From: Paula Mukherjee ([paulaoptom@gmail.com](mailto:paulaoptom@gmail.com))

Subject: **Continuing Education: the key to improving Optometry as a Profession**

When a person looks into the history of legislation of optometry as a profession in developed countries, a common factor that arises among all the situations is 'Education'. Good quality education coupled with standard eye care services form the basis for raising the issue of legislation of optometry as a profession. As a step towards achieving this, the

Optometry Council of India (OCI) commenced registration of optometrists in late January 2014. It's been a year and OCI has received over 700 applications for registration.

Once an optometrist registers with the OCI, his/her registration is only valid for a period of three years. The optometrist should accumulate 50 credit points during this three year period in order to renew the registration. Credit points are acquired through continuing education.

CE activities are classified broadly into four main sections by the OCI and several activities are available under each of the four sections. Points are allocated for each activity depending on the feasibility, achievability, and difficulty. A minimum of 50 points spread over at least two of the four main categories listed below are expected to be completed over a 3-year period from the time of registration.

### **Types of activities**

I. **Scholarly Activity**

II. **Educational Activity**

III. **Recipient Activity**

IV. **Skills Upgradation**

### **Information for Providers of Continuing Education:**

CE programs in optometry are provided by many organisations today. These programmes need to meet a minimum standard. In order to achieve a good standard in CE, OCI has decided to accredit CE providers. To begin with, all member associations of Indian Optometry Federation (IOF) and all member schools of Association of Schools and College of Optometry (ASCO) would be accredited providers, provided they apply to OCI. All other organisations are also open to applying to OCI to become an accredited provider. To be eligible for gaining the accredited provider status, a CE activity provider has to register with the OCI (currently at no cost). The accredited provider then has to provide information containing details such as the agenda of the CE activity, the speakers and their qualifications, number of hours of lectures and number of hours of practicals/tutorials or hands-on workshops to get the CE activity accredited. After approval from the OCI, the course can then be advertised by the provider as accredited by OCI, and can carry the OCI logo.

Registration and improving the knowledge base of optometrists through continuing education will definitely take the profession to better heights. Through better education and skill development, optometrists as primary health care professionals can also address 80 per cent of the visual needs of the population of India that requires eye care.

Optometry Council of India is supported by Brien Holden Vision Institute and Optometry Giving Sight and thanks them for all their support.

For Full Article, please visit <http://visionplusmag.fourplusmedia.com/?p=14471>

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Date: Tuesday, 21 July 2015

From: Dinesh C Fernandes ([dinesh.fernandes@indiavisioninstitute.org](mailto:dinesh.fernandes@indiavisioninstitute.org))

Subject: **Actress Lakshmi Manchu Walks in the Dark to eradicate 'preventable' blindness (Video)**

To raise awareness about the need to eradicate 'preventable' blindness, popular actress Lakshmi Manchu was joined by over 400 students, opinion makers and dignitaries for Walk in the Dark at Jalavihar, Necklace Road in Hyderabad on 12 April 2015.

Organized by India Vision Institute (IVI), the Walk in the Dark drew attention towards uncorrected refractive error and how a pair of spectacles can improve vision enabling adults to get back to work and children to learn and perform better.

For the video please visit the youtube link:

<https://www.youtube.com/watch?v=Qtvo5CiqhYs&feature=youtu.be>

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IVI invites contributions including latest updates and new developments in Optometry, innovative ideas, optometry job vacancies, conferences, links to interesting articles and other latest happenings.

All contributions need to be in word format (not more than two to three paragraphs including a title).

Send in your contributions with your name and contact details to [info@indiavisioninstitute.org](mailto:info@indiavisioninstitute.org)

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