**Optometry DisList** 

Instance 2015: 13 Monday, 10 August 2015

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Today's Messages:

#### Subject: Australia loses research and humanitarian giant

Sydney: Optometry and vision science, Australia and the world are mourning the passing of Professor Brien Holden OAM, who was once described as the most influential optometrist of our generation.

Professor of Optometry at UNSW Australia and CEO of the Brien Holden Vision Institute, Holden was an internationally renowned scientist and humanitarian. Nearly all those worldwide who wear contact lenses, have directly benefitted from his research efforts, including co-developing silicone hydrogel contact lenses, the most popular contact lens material.

In a career that stretched more than 40 years, Holden was the driver behind a social enterprise that has delivered eye care services to more than three million people in 54 countries; established 429 vision centers or sites for eye care worldwide; and trained over 130,000 personnel around the world.

News Source: <u>http://www.brienholdenvision.org/media-centre/latest-news/1028-australia-loses-research-and-humanitarian-giant.html</u>

## Date: Wednesday, 22 July 2015 From Asha Leledas (<u>ashaleledas@gmail.com</u>) Subject**: Bionic eye implant world first**

Surgeons in Manchester have performed the first bionic eye implant in a patient with the most common cause of sight loss in the developed world. Ray Flynn, 80, has dry age-related macular degeneration which has led to the total loss of his central vision. He is using a retinal implant which converts video images from a miniature video camera worn on his glasses.

## Weed or flower?

The Argus II implant, manufactured by the US firm Second Sight, has previously been used to restore some vision to patients who are blind as a result of a rare condition known as retinitis pigmentosa.

The operation, at Manchester Royal Eye Hospital, is the first time it has been implanted in a patient with age-related macular degeneration (AMD) which affects at least half a million people in the UK to some extent. The operation took four hours and was led by Paulo Stanga, consultant ophthalmologist and vitreo-retinal surgeon at Manchester Royal Eye Hospital.

#### How it works

The bionic eye implant receives its visual information from a miniature camera mounted on glasses worn by the patient. The images are converted into electrical pulses and transmitted wirelessly to an array of electrodes attached to the retina. The electrodes stimulate the remaining retina's remaining cells which send the information to the brain.

In a test, two weeks after surgery, Mr Flynn was able to detect the pattern of horizontal, vertical and diagonal lines on a computer screen using the implant. He kept his eyes closed during the test so that the medical team could be sure that the visual information was coming via the camera on his glasses and the implant.

The implant cannot provide any highly detailed vision - but previous studies have shown it can help patients to detect distinct patterns such as door frames and shapes. Prof Stanga said that in time, Mr Flynn should learn how to interpret the images from the implant more effectively.

The trial is being held in the Manchester Clinical Research Facility - funded by the National Institute for Health Research and Wellcome Trust, which aims to bring new drugs and medical devices to patients.

For full article, please visit: <u>http://www.bbc.com/news/health-33571412</u>

#### Date: Thursday 23, July 2015 From: Vandana Sahani (<u>vandanasahani60@gmail.com</u>) Subject: **Blood Pressure and Heart Rate Alterations through Music in Patients Undergoing Cataract Surgery in Greece**

Introduction: Music has been proposed as a safe, inexpensive, non-pharmacological antistress intervention. The purpose of this study was to determine whether patients undergoing cataract surgery while listening to meditation music experience lower levels of blood pressure and heart rate.

Methods: Two hundred individuals undergoing cataract surgery participated in the study. Hundred individuals listened to meditation music, through headphones, before and during the operation (intervention group) and 100 individuals received standard care (control group). Patients stress coping skills were measured by the Sense of Coherence Scale (SOC Scale). Systolic and diastolic blood pressure and heart rate were defined as outcome measures.

Results: According to the SOC Scale, both groups had similar stress coping skills (mean score: 127.6 for the intervention group and 127.3 for the control group). Before entering the operating room (OR) as well as during surgery the rise in systolic and diastolic pressures was significantly lower in the intervention group (P, 0.001). Among patients receiving antihypertensive therapy, those in the intervention group presented a lower increase only in systolic pressure (P, 0.001) at both time recordings. For those patients in the intervention group who did not receive antihypertensive treatment, lower systolic blood pressure at both time recordings was recorded (P, 0.001) while lower diastolic pressure was observed only during entry to the OR (P = 0.021). Heart rate was not altered between the two groups in any of the recordings.

Conclusions: Meditation music influenced patients' preoperative stress with regard to systolic blood pressure. This kind of music can be used as an alternative or complementary method for blood pressure stabilizing in patients undergoing cataract surgery.

For full article, please visit: <u>http://www.la-press.com/blood-pressure-and-heart-rate-alterations-through-music-in-patients-un-article-a4896</u>

## Date: Thursday, 23 July 2015 From: Elizabeth Traub (<u>etraub@sbg-ny.com</u>) Subject: **Revo Partners With Bono to Fight Vision Impairment and Unnecessary Blindness**

Eyewear brand Revo and U2 lead singer Bono announced a partnership today to help prevent vision impairment and blindness in more than 5 million people by 2020. The initiative, dubbed "Buy Vision, Give Sight," will drive \$10 million to the fight to improve access to eye screening, prescription glasses and eye health care in under-resourced communities around the world.

When a consumer purchases a new pair of Revo sunglasses, \$10 from the sale of every pair, up to a total of \$10 million, will be donated by Revo to the "Buy Vision, Give Sight" (Revo) initiative. To execute the initiative, Revo and Bono are partnering with the non-profit Brien Holden Vision Institute (Brien Holden Vision Institute), whose mission is to provide sustainable solutions for eye care and end avoidable blindness and vision impairment in under-resourced communities. The majority of Revo's contribution to Brien Holden will support their "Our Children's Vision" campaign (Brien Holden Vision Institute) whose aim is to prevent impaired vision and preventable blindness in more than 50 million children by 2020. A portion of the "Buy Vision, Give Sight" funds will also be used for eye health medical research.

Bono, who has a long track record in global health, particularly as an activist in the fight against HIV/AIDS, was diagnosed with glaucoma 20 years ago. His experience with glaucoma, for which he has been able to receive excellent treatment, has made him determined to find a way to increase access to frontline eye health services for others. The U2 singer will appear in Revo advertisements and campaign materials supporting the initiative.

"The 'Buy Vision, Give Sight' campaign is a very personal one for me," said Bono. "Thanks to good medical care my eyes are okay, but tens of millions of people around the world with sight problems don't have access to glasses, or even a basic eye test. Sight is a human right and the 'Buy Vision, Give Sight' initiative will help ensure millions of people have access to the eye exams and glasses they need to see."

Bono added: "With Brien Holden, we found a partner doing remarkable work, hand-inhand with local communities. It's mind-expanding what they are achieving; we're very excited to work in partnership with them and Revo."

"Eye tests and eye examinations are at the front line of eye care. But for millions of people without medical access, the simplest problems go untreated, children lose education opportunities and adults lose employment, often resulting in poverty. It's unnecessary and avoidable, " said Kovin Naidoo, Global Director of Programs, Brien Holden Vision Institute. For further information please contact, Elizabeth Traub (<u>etraub@sbg-ny.com</u>)

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# Date: Thursday, 30 July 2015 From: B V Tejah (<u>tejahb@iapb.org</u>) Subject: **Eye Health Leaders' to be felicitated at IAPB Council in China**

The International Agency for the Prevention of Blindness (IAPB), with support from L'OCCITANE Foundation, will be delivering their third 'Eye Health Leaders' awards during IAPB's Council of Members meetings in Beijing, China in October 2015.

The 'Eye Health Leaders' (EHL) awards recognise and celebrate eye health professionals with the vision and potential to lead the eye health sector in the future.

Nominations are expected to come in from nearly 150 IAPB member organisations from around the world, including virtually every major international eye health NGO, global apex bodies for both ophthalmology and optometry, disabled persons' organisations, academic institutions and concerned corporations, all working together to eliminate avoidable blindness and visual impairment worldwide.

Previous eye health leaders have moved on to take leading roles in their areas of operations. Dr Uduak Udom, one of the first crop of Eye Health Leaders, for example, is now the President-Elect of the World Council of Optometry. She is also a leading advocate for eye care services in Nigeria. Dr Rohit Khanna, another 2013 awardee, is now on the IAPB 10<sup>th</sup> General Assembly (10GA) Programme Committee.

The L'OCCITANE Foundation is once again sponsoring the eye health leader awards. The Foundation has been part of the EHL award initiative from inception, and has always expressed their keen interest in showcasing and celebrating eye care professionals with talent and drive.

To find out more about the Awards, please visit: <u>http://com.iapb.org</u>

For more details, please contact B V Tejah (<u>tejahb@iapb.org</u>)

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Date: Friday, 31 July 2015

From: Optometry Council of India (<u>info@optometrycouncilofindia.org</u>) Subject: **Starlite Optiks, Powai (Job Opening)** 

Starlite Optiks, at Hiranadani Powai, Mumbai is looking for a Graduate in Optometry with 2-3 years of experience.

Desired skills

1) Full Fledged clinical work up (History taking, Refraction, Slit lamp and Diagnosis)

- 2) Progressive Lens recommendations based on professional and commercial limitations of patients
- Contact lenses counselling detailed examination assessing suitability Training Trouble shooting
- 4) Trouble shooting (Single vision, bifocals and progressive lenses prescriptions)
- 5) Ability to convince both high end and midlevel customers to take up products according to their budget availability

Package:

- 1) Furnished accommodation (1bedroom flat) at Royal Palms Estate, Goregaon.
- 2) Salaries NOT LOWER THAN 35000/- per month for full showroom timings. Current salary is not a constraint for the right candidate
- 3) WEEKLY OFF will be on Monday.

Interested candidates may send their Curriculum Vitae to <a href="mailto:sangeetabhasin@gmail.com">sangeetabhasin@gmail.com</a>

For more information please contact Optometry Council of India (<u>info@optometrycouncilofindia.org</u>)

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Date: Saturday, 1 August 2015

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

Subject: Scientists have developed an eye drop that can dissolve cataracts

Researchers in the US have developed a new drug that can be delivered directly into the eye via an eye dropper to shrink down and dissolve cataracts - the leading cause of blindness in humans.

Scientists aren't entirely sure what causes cataracts, but most cases are related to age, with the <u>US National Eye Institute reporting that</u> by the age of 80, more than half of all Americans either have a cataract, or have had cataract surgery.

<u>According to the Fred Hollows Foundation</u>, an estimated 32.4 million people around the world today are blind, and 90 percent of them live in developing countries. More than half of these cases were caused by cataract.

The new drug is based on a naturally-occurring steroid called lanosterol. The idea to test the effectiveness of lanosterol on cataracts came to the researchers when they became aware of two children in China who had inherited a congenital form of cataract, which had never affected their parents. The researchers discovered that these siblings shared a mutation that stopped the production of lanosterol, which their parents lacked. The researchers proposed that the steroid might halt the defective crystallin proteins from clumping together and forming cataracts in the non-congenital form of the disease.

They tested their lanosterol-based eye drops in three types of experiments. They worked with human lens in the lab and saw a decrease in cataract size. They then tested the effects on rabbits, <u>and according to Hanae Armitage at Science Mag</u>, after six days, all but two of their 13 patients had gone from having severe cataracts to mild cataracts or no cataracts at all. Finally, they tested the eye drops on dogs with naturally occurring cataracts. The results have been published in <u>Nature</u>.

For full article, please visit: <u>http://www.sciencealert.com/scientists-have-developed-an-eye-drop-that-can-dissolve-cataracts-from-eyes</u>

Date: Thursday, 6 August 2015 From: Chandan Shettigar(<u>chandan.s@manipal.edu</u>) Subject: **The 'Smart' way to Prevent Blindness** 

CHENNAI: A large number of conditions such as congenital blindness and diabetic retinopathy can now be diagnosed without expensive diagnostic aids. It can be done with a simple imaging system that works with your average high-end smartphone, after which the images are WhatsApped to an optometrist for a quick consult.

A large portion of India's preventable blindness burden is because people don't get diagnosed or treated on time. "We were shocked to find that some patients were completely blind and they don't know it," said diabetologist Dr V Mohan.

So far, a hundred of these mini telescope like devices called Fundus on Phone have been sold to clinics across the country, but the true potential of this device is largely untapped, according to its developer Dr Anand Sivaraman of Remedies Innovative Solutions.

"Fundus on Phone was developed indigenously in 2010 and it's built in such a way that it can be carried anywhere easily, so there will be plenty of rural applications here. All it needs is a smartphone mounted on it and practically anybody can capture images of the patients eye for diagnosis," he said. After devices like Peek made their debut, using smartphones to try and diagnose a variety of eye conditions are in vogue. But just how effective these methods are have never been scientifically verified until researchers at the Madras Diabetes Research Foundation (MDRF) decided to put the device called the Fundus on Phone to the test. "So, we did a study on 301 patients using this technique and what we found was that the images produced were stunningly effective in diagnosing retinopathy. The effectiveness was as high as 94 percent which is amazing because in patients of this nature anything over 70 percent is acceptable," said Dr R M Anjana, diabetologist and researcher. When compared to the Carl Zeiss Mydiatric Retinal Camera, which is the gold standard for optical diagnosis, the images were a lot less high res but they were still easy enough to read a good diagnosis from.

Article Source: <u>http://www.newindianexpress.com/cities/chennai/The-Smart-way-to-</u> <u>Prevent-Blindness/2015/08/01/article2950468.ece</u>

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