Optometry DisList

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Date: Friday, 20 November 2015

From: Alison Ewbank (<u>a.ewbank@iacle.org</u>)

Subject: IACLE launches 2016 awards for achievements in contact lens teaching

The International Association of Contact Lens Educators (IACLE) is offering educators around the world the chance to become IACLE Contact Lens Educator of the Year.

The 2016 IACLE Contact Lens Educator of the Year Awards will recognise and reward achievements in contact lens education worldwide. The awards are sponsored by CooperVision.

IACLE Contact Lens Educator of the Year will be awarded to three individuals, one from each of IACLE's three global regions:

- Asia Pacific
- Europe / Africa Middle East
- Americas

The three winners will each receive:

- **A bursary of up to US\$3,000** towards the cost of attending a major international conference during 2016, thanks to generous sponsorship from CooperVision. This year recipients will have a choice of events to attend:
 - NCC 2016 (Veldhoven, The Netherlands) 13-14 March
 - <u>The 10th Asia Cornea & Contact Lens Conference</u> (Hong Kong) 28-29 April
 - <u>American Academy of Optometry</u> (Anaheim, USA) 9-12 November
- **Permission to use the title** 2016 IACLE Contact Lens Educator of the Year for their region.

• A certificate to mark the award, to be presented at the event attended.

The IACLE Contact Lens Educator of the Year Awards is **open to all IACLE members** from any country, with preference given to members who are active FIACLEs (Fellows of IACLE) or have attempted the IACLE Fellowship Exam. The awards will recognise work by those who are established contact lens teachers. Equally, the award may be given in recognition of a useful educational contribution by an Associate Member, actively involved in IACLE and in contact lens education.

The **IACLE Travel Award**, offered for the first time in 2013, is a travel bursary for an IACLE Educator Member starting out on his / her career who would not otherwise be able to attend a major international conference. The 2016 IACLE Travel Award is sponsored by IACLE and the winner will receive a **bursary of up to US\$3,000** towards the cost of attending one of the three international conferences selected for 2016.

The deadline for entries for the 2016 awards is **midnight on Thursday 31 December 2015.** Entries should be submitted by email to IACLE Regional / National Coordinators using the application forms to be found at <u>www.iacle.org</u> (Awards).

For more information please contact: Alison Ewbank (<u>a.ewbank@iacle.org</u>)

Date: Tuesday, 24 November 2015

From: Deepika Reddy (<u>deepikak.opt@gmail.com</u>)

Subject: Watching movies helped improve vision in children with amblyopia

Amblyopia, commonly known as "lazy-eye," has been classically treated by patching the strong eye to force the weaker eye to be used. However, the concept of binocular dysfunction, in which the brain suppresses the image from the weaker eye in favor of the stronger eye, has motivated new approaches to amblyopia treatment. In a new report published in the *Journal of the American Association for Pediatric Ophthalmology and Strabismus (AAPOS)*, researchers describe how the use of dichoptic therapy, which presents different images to each eye separately, combined with popular children's movies, has produced improved visual acuity in young children.

Dichoptic techniques combined with perceptual-learning tasks or simple games have been shown to improve visual acuity significantly in amblyopia. However, children find these tasks intensive and repetitive, and up to 40% of unsupervised patients are noncompliant. A multicenter team of researchers investigated a potentially more engaging method by using popular animated movies with complementary dichoptic stimulation to hold children's interest. In the study eight amblyopic children 4-10 years of age watched three dichoptic movies per week for two weeks. Each eye was presented with an image with irregularly shaped blobs that masked different portions of the film. The blobs seen by one eye were the inverse of the blobs seen by the other, so that the entire screen could only be perceived with binocular vision. In order to overcome suppression and allow binocular vision to form a complete picture, the image presented to the stronger eye was reduced in contrast.

Visual acuity improved in the eye with amblyopia in this study. "Children achieved 1-4 lines of improvement in visual acuity with just six sessions (nine hours) of dichoptic (both eyes looking at target at same time) movie viewing over two weeks," explained Dr. Birch. "Patching, by comparison, requires 120 hours of treatment to achieve 1 line of improvement in amblyopic children who have already been treated with spectacles for 12-16 weeks."

For full article, please visit: <u>http://www.eurekalert.org/pub_releases/2015-10/ehs-wmh101315.php</u>

Original article source: http://www.jaapos.org/article/S1091-8531(15)00517-0/pdf

Date: Wednesday, 25 November 2015

From: Kovin Naidoo (K.Naidoo@brienholdenvision.org)

Subject: **Buy Vision Give Sight - Bono and Brien Holden Vision Institute campaign video**

Eyewear brand Revo and U2 lead singer, Bono, have launched a new range of sunglasses that will help eliminate avoidable blindness and vision impairment.

Proceeds from the sale of the 'Vision over Visibility' collection, designed in collaboration with Bono, will fund <u>Buy Vision, Give Sight</u> - a campaign that through the work of the Brien Holden Vision Institute will provide eye care services to five million adults and children by the 2020.

Revo will donate \$10 from the sale of every pair of Revo sunglasses, including Bono's 'Vision over Visibility' collection, up to a total of \$10 million to the 'Buy Vision, Give Sight' initiative. The funds donated by Revo will help pay for basic eye care services, particularly eye tests and prescription glasses, and also build stronger eye care services in target communities for the longer term by training local people to provide eye care and detect eye diseases.

Please visit the YouTube link to a new campaign that the Brien Holden Vision Institute, BONO (U2) and REVO have launched.

https://www.youtube.com/watch?v=YcQ3pzawDKo

For more information about the initiative please visit <u>http://www.brienholdenvision.org/media-centre/latest-news/1052-vision-over-visibility.html</u>

Date: Thursday, 26 November 2015 From: Apoorva Chauhan (<u>apoorva.chauhan@indiavisioninstitute.org</u>) Subject**: Eyes wired to spinal cord instead of brain can still see**

Transplanted eyes located far outside the head in a vertebrate animal model can see even without a direct neural connection to the brain, researchers have shown for the first time. The connections were tested using fluorescence microscopy, an LED light setup and camera-based motion-tracking technology.

Biologists at Tufts University School of Arts and Sciences used a frog model to shed new light on one of the major questions in regenerative medicine, bioengineering and sensory augmentation research: how the brain and body adapt to major organizational changes.

"Our research reveals the brain's remarkable ability, or plasticity, to process visual data coming from misplaced eyes, even when they are located far from the head," said Dr. Douglas J. Blackiston, first author of the paper, published in the *Journal of Experimental Biology* (doi: 10.1242/jeb.084921). Blackiston is a postdoctoral associate in the laboratory of co-author Dr. Michael Levin, professor of biology and director of the Center for Regenerative and Developmental Biology at Tufts University.

In the experiment, the team surgically removed donor embryo eye primordia, marked them with fluorescent proteins, and grafted them into the posterior region of recipient embryos to induce the growth of ectopic eyes. The recipients' natural eyes were removed, leaving only the ectopic eyes. Fluorescence microscopy showed various innervation patterns, but none of the animals developed nerves that connected the ectopic eyes to the brain or cranial region.

To determine whether the ectopic eyes conveyed visual information, the team developed a computer-controlled visual training system in which quadrants of water were illuminated by either red or blue LED lights. The system could administer a mild electric shock to tadpoles swimming in a particular quadrant. A motion tracking system outfitted with a camera allowed the scientists to monitor and record the tadpoles' motion and speed.

The team made exciting discoveries: Just over 19 percent of the animals with optic nerves that connected to the spine demonstrated learned responses to the lights. They swam away from the red light, while the blue light stimulated natural movement. Their response to the lights elicited during the experiments was no different from that of a control group of

tadpoles with natural eyes intact. This response was not demonstrated by eyeless tadpoles or tadpoles that did not receive any electrical shock.

The findings suggest plasticity in the brain's ability to incorporate signals from various body regions into behavioral programs that had evolved with a specific and different body plan.

Article Source: http://www.photonics.com/Article.aspx?AID=53816

Original Article source: http://jeb.biologists.org/content/216/6/ii

Date: Monday, 30 November 2015 From Jissa James (<u>jissa.james@indiavisioninstitute.org</u>) Subject: **Simulating new born face perception**

Abstract

A frequently asked question concerns what a newborn infant can actually see. The contrast sensitivity function of newborn infants is well known, but its implications for the ability of newborns to perceive faces of adults remain unclear. We gray scale animations of facial expressions in terms of both spatial frequency and contrast to correspond to the properties of newborn infants' acuity were filtered and shown to adult participants. It was reasoned that if adults were unable to identify the depicted facial expressions, then it would also seem unlikely that newborn infants could identify the same expressions. It was found that for the simulated acuity the different expressions could be rather well identified at a distance of 30 cm, but when the distance was increased to 120 cm their discriminability was much degraded. This shows that although the perception of faces and facial expressions can function at the low visual resolution of the newborn infant, it is insufficient for distinguishing faces and facial expressions at moderate distances.

For full Article, please visit <u>http://jov.arvojournals.org/article.aspx?articleid=2213027</u>

Date: Monday 7, December 2015

From: Stephen Davis (S.Davis@brienholdenvision.org)

Subject: Kovin Naidoo appointed CEO of Brien Holden Vision Institute

The board of the Brien Holden Vision Institute has announced the appointment of Professor Kovin Naidoo to the position of CEO. Professor Naidoo was appointed Interim CEO following the passing of Professor Brien Holden in July 2015.

Chair of the board, Professor Brian Layland OAM, said the appointment vindicates the outstanding leadership Professor Naidoo has brought to the role in an interim capacity and his long history of exemplary service to the Institute. "Kovin is a wonderful leader, a person

of great integrity, a remarkable entrepreneur and a global leader in advocating for eye care access," Professor Layland said.

Professor Naidoo said the Brien Holden Vision Institute is founded on more than 40 years of extraordinary history; leadership in the industry and in the public health arena worldwide. "Importantly, the Institute's success is due to our unanimously held goal – to create change, provide innovative solutions and lead the way," he said.

"We are proudly a unique collective of outstanding governance experts, astute business people, researchers, public health professionals, and education and technology specialists. We have excelled in all areas, forging new pathways where previously they did not exist; invention, creativity and excellence are at the core of all we do. Our future, thanks to Professor Holden's legacy, our people and the collective leadership, is in good hands, as it always has been," he added.

Professor Naidoo is supported by an executive group comprising Yvette Waddell (COO, Brien Holden Vision Institute), Dr Paul Erickson (Head of Research and Development and CEO Brien Holden Vision Pty Ltd), Amanda Davis (COO, Brien Holden Vision Institute Public Health) and Dr Kah Ooi Tan (CEO, Brien Holden Vision Institute China)

"We are fortunate to have such a talented and experienced group steering our organisation," said Professor Naidoo.

For more details, please contact Stephen Davis (S.Davis@brienholdenvision.org)

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