

Optometry DistList

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Date: 04 December, 2016

From: Supreethi (suprithi2007@rediffmail.com)

Subject: **Zika and Glaucoma Linked for First Time in New Study**

A team of researchers in Brazil and at the Yale School of Public Health has published the first report demonstrating that the Zika virus can cause glaucoma in infants exposed to the virus during gestation.

Exposure to the Zika virus during pregnancy causes birth defects of the central nervous system, including microcephaly. Brazilian and Yale School of Public Health researchers had reported early during the microcephaly epidemic that the virus also causes severe lesions in the retina, the posterior portion of the eye. However, until now, there has been no evidence that Zika causes glaucoma, a condition that can result in permanent damage to the optic nerve and blindness.

While conducting their investigations of the microcephaly epidemic in Salvador in Northeast Brazil, the researchers identified a three-month-old boy who was exposed to Zika virus during gestation. While no signs of glaucoma were present at the time of birth, the infant developed swelling, pain, and tearing in the right eye.

The Zika virus, which is primarily transmitted through infected mosquitoes, has reached epidemic levels in several areas worldwide, and is of particular concern in Brazil, where the Pan American Health Organization reports more than 200,000 suspected cases and 109,000 confirmed cases of the disease. There is currently no vaccine for the Zika virus.

For the complete article, please visit: <http://news.yale.edu/2016/11/30/zika-and-glaucoma-linked-first-time-new-study>

Date: 15 December, 2016
From: Priyanka Sinha (priyankaxmahe@gmail.com)
Subject: Gold Nano-Particles May Help Treat Sight Loss

Gold nanotechnology could help reduce the number of injections needed to treat Age-related macular degeneration, researchers believe.

Australian and Chinese researchers believe gold nano-particles could help better deliver drugs to the eye. Their study, published this week in the chemistry journal *Angewandte Chemie*, tested how a hydrogel filled with gold nano-particles reacted when exposed to light. The researchers found the gel softened and released a dose of sight-restoring drug when it warmed by only few degrees under the light. The process reversed when the light disappeared, hardening the gel and preventing the drug's delivery. The biological activity of the protein-based drug was "highly retained" after its release, the study said.

Researcher Johan Basuki, from Australia's government-backed CSIRO, hoped the new drug delivery system would let AMD patients have injections less frequently - potentially once every six months. The preliminary safety tests were conducted on rabbits, but further research is needed before human trials will be considered.

For the complete article, please visit: <http://www.bbc.com/news/world-australia-38324237>

Date: 22 December, 2016
From: Praveena Jaipal (praveena.jaipal@indiavisioninstitute.org)
Subject: Ten People to Get NHS Bionic Eyes

The NHS will pay for 10 blind patients to have "bionic eyes" to help treat an inherited form of blindness. The bionic eye is a retinal implant which interprets images captured by a miniature video camera worn on a pair of glasses.

Five patients will be treated at Manchester Royal Eye Hospital and five at Moorfields Eye Hospital in 2017. They will be monitored for a year afterwards to see how they get on in everyday life.

"It surpassed all of our expectations when we realised that one of the retinitis pigmentosa patients using the bionic eye could identify large letters for the first time in his adult life.", said Prof Paulo Stanga-Manchester hospital.

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.

For the complete article, please visit: <http://www.bbc.com/news/health-38391247>

Date: 12 September, 2016

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

Subject: **Microsoft India Launches Global Research Group to Develop AI-Powered Eye Care**

Microsoft India is launching a research group that will leverage artificial intelligence to deliver large-scale eye care in collaboration with Hyderabad-based L V Prasad Eye Institute. The Microsoft Intelligent Network for Eyecare (MINE) will work with a consortium of research and technology institutions around the world, including the University of Miami, Federal University of Sao Paulo and Australia's Brien Holden Vision Institute.

The idea is similar to Google DeepMind's project, which targets the UK and works with their National Health Services to use artificial intelligence to detect and treat blindness-causing eye diseases.

Using Microsoft's cloud platform technology Cortana Intelligence Suite, MINE will collaborate and work from datasets of patients around the world to develop machine learning predictive models for vision impairment and eye disease, with the ultimate goal of eliminating avoidable blindness and scaling worldwide delivery of eye care services.

Children will be a big focus for the project, and the consortium will explore how machine learning can be used to study rate of change of myopia and other conditions that impact eyesight in children. The group also aims to develop predictive outcomes of refractive surgery and establish optimal surgery parameters for each individual.

"At LVPEI, we have been using Microsoft Azure Machine Learning and Power BI to drive clinical interventions and improve patient outcomes," L V Prasad Eye Institute Founder-Chair Dr. G.N. Rao said in a statement. "Today, we take great pride in taking forward our partnership with Microsoft and joining forces with global institutes to revolutionize the field of ophthalmology in India and across the world. We are confident that this partnership will not only open doors to opportunities in the field of eye care, but also pave way for others to leverage technology to address several other critical eye diseases."

For the complete article, please visit:

<http://www.mobihealthnews.com/content/microsoft-india-launches-global-research-group-develop-ai-powered-eye-care>

Date: 25 December, 2016

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

Subject: **The 2nd World Congress of Optometry - September 11-13, 2017**

The 2nd World Congress of Optometry, with the theme “Accessible, quality vision and eye health” is being held in Hyderabad, India from September 11-13, 2017. Building on the excitement from the 1st World Congress in Medellin in 2015 which attracted over 2300 delegates, this biennial congress is a World Council of Optometry (WCO) initiative in partnership with the Asia Pacific Council of Optometry (APCO) and the India Vision Institute (IVI).

This year’s theme ties into the World Health Organisation (WHO) ‘Universal Eye Health: A global action plan 2014-2019’, the target of which is a reduction in the prevalence of avoidable visual impairment by 25% by 2019. One of the ways to accomplish this is to have in place a strong and equitable eye health system within which optometry plays a valuable and essential role.

The Scientific track of the program will feature cutting edge research and clinical practice, while the Educators’ track will offer a unique platform to shape optometric education. The World Congress will bring together optometric expertise from across the world offering delegates globally recognized US COPE and UK CET continuing education accreditation.

At a strategic level the Presidential Forum will convene Presidents of national optometric associations, Deans of schools of optometry and key industry stakeholders to discuss the progress of optometry and shape the future of the profession across the world.

Mark your calendars for this exciting event! Come and share and learn with your colleagues in optometry!

We look forward to seeing you in Hyderabad!

Registrations are now open!

For more information, please click <http://www.worldcongressofoptometry.org/>

Social Media: www.facebook.com/worldcongressofoptometry

Date: 28 December, 2016

From: Riswan Rasheed (optom.riswan@gmail.com)

Subject: **OPTOCON II – CME on Contact Lens**

Giridhar Eye Institute-Kochi invites you to ‘OPTOCON-II’ to be held on **Sunday 8 January, 2017** at Abad Plaza, M.G. Road - Cochin. This year the focus is on contact lenses.

Contact lenses are a highly evolving specialty. The science of contact lenses has advanced leaps and bounds in the recent past. This fascinating field spans a wide area including cosmetic contact lenses, simple soft contact lenses for refractive correction, and specialized contact lenses like scleral lens which is used for complex corneal diseases.

The program is aimed to give a comprehensive understanding of the various aspects of contact lens practice like selecting a candidate, deciding on the type of contact lens, and fitting and dispensing. The topics are selected in such a way that it will be useful for a general optometrist, optometrists specialized in contact lens and optometry interns specializing in contact lens practice. We look forward to welcoming you to this academic feast.

For more information, please contact Mr Riswan Rasheed on (+91) 890 77-7 81 82

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