

Optometry DistList

Instance 2017: 46

Friday, 19 May 2017

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- LV Prasad Eye Institute Sets World Record in Corneal Transplants
- Immediate hire of Optometrists to work out of Hyderabad

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Date: 01 April, 2017

From: Julius Liubinas ([jliubinas@gmail.com](mailto:jliubinas@gmail.com))

Subject: **App Provides Portable Perimeter**

Melbourne researchers have developed a portable perimeter in the form of an iPad app to measure visual fields away from an optometry practice. The Melbourne Rapid Fields app was highlighted at the annual meeting of the Association for Research into Vision and Ophthalmology (ARVO) in Seattle, USA.

It can be used by glaucoma patients to monitor their visual fields at home so they can present to optometrists earlier when disease starts to progress.

The app was the brainchild of optometrist and vision scientist Professor Vingrys from the University of Melbourne's Department of Optometry and Vision Sciences, and Dr George Kong from the Royal Victorian Eye and Ear Hospital, an ophthalmologist specialising in glaucoma who is a versed computer programmer.

'The app can be used to measure visual fields for glaucoma, AMD, diabetes, retinal disease, optic neuropathies and neurological conditions,' Professor Vingrys said.

Home monitoring needs involvement and supervision by the patient's optometrist who would teach the patient how to do their visual fields at home using this test. The patient would then send the data to the optometrist by broadband and they will monitor them in this way. 'If the home monitoring fails to give sensible data, the patient would have to go to the optometry practice for regular check-ups,' Professor Vingrys said. Another use of the iPad would be in remote areas where the equipment is not available due to cost or distance. In these situations a trained assistant or GP could administer the test.

Professor Vingrys led a team of researchers from the department and the Centre for Eye Research Australia in evaluating the perimeter, and he detailed the findings at ARVO. The study tested 21 patients with glaucoma-related visual field loss and 20 age-similar participants with normal visual fields. It found the tablet perimeter performed well compared to the Humphrey Field Analyzer.

He said the portable perimeter would not replace the Humphrey or Medmont in optometry practices but would complement them.

For the complete article, please visit: <http://www.optometry.org.au/blog-news/2016/5/5/app-provides-portable-perimeter/>

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Date: 16 April, 2017

From: Sneha Krishnan ([iyers3012@gmail.com](mailto:iyers3012@gmail.com))

Subject: **Engineers Aim to Restore Vision with Retinal Prosthesis**

American researchers are making progress on a retinal prosthesis that aims to restore functional vision in the blind. The development brings hope to millions of people living with degenerative eye conditions, including age-related macular degeneration, retinitis pigmentosa and diabetic eye disease.

The project is the result of collaboration between a team of engineers at the University of California San Diego and the start-up, Nanovision Biosciences.

The new prosthesis relies on two technological breakthroughs. Silicon nanowires mimic the light-sensing rods and cones to simultaneously sense light and stimulate the retina, while an external wireless device transmits power and data to the nanowires.

Nanovision Biosciences chief executive officer, Scott Thorogood, said that existing retinal prostheses only gave patients the ability to detect light from shadows. "We have a theoretical target of around 20/200 which is pretty good compared to people who can just see light and dark. You would have some useful vision with that kind of visual acuity," Mr Thorogood highlighted. The device was activated directly by light entering the eye at high spatial resolution. The prosthesis was powered and controlled by an external electrical signal.

The technology was more responsive at low light levels and allowed for the tailoring of stimulation levels to changes in ambient light and the specific needs of a patient, he explained.

For the complete article, please visit: <https://www.aop.org.uk/ot/science-and-vision/technology/2017/03/27/engineers-aim-to-restore-vision-with-retinal-prosthesis>

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Date: 17 May, 2017

From: L V Prasad Eye Institute ([lvpei.sy@gmail.com](mailto:lvpei.sy@gmail.com))

Subject: **Dr G N Rao inducted to ASCRS Ophthalmology Hall of Fame**

Dr Gullapalli N Rao, Founder and Chair, L V Prasad Eye Institute, has been inducted into the prestigious 2017 Ophthalmology Hall of Fame instituted by the American Society of Cataract and Refractive Surgery (ASCRS). The event took place on 6 May 2017 at Los Angeles.

The Hall of Fame honours pioneers in ophthalmology for their distinguished careers and contributions, with the physicians selected by their peers – more than 30,000 ophthalmologists across the world. Since its inception in 1999, 55 scientists and physicians of all generations so far have been recognized by the Ophthalmology Hall of Fame.

According to the ASCRS website, the Hall of Fame inductees are "individuals whose contribution to the field of ophthalmology have shaped the way modern ophthalmology is practiced" and "who have trained ophthalmologists who practice throughout the world, and developed institutions that will continue ophthalmic research for years to come."

For the complete article, please visit: [http://www.lvpei.org/news-events/press-releases/press\\_details.php?post=155](http://www.lvpei.org/news-events/press-releases/press_details.php?post=155)

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Date: 07 April, 2017  
From: C. Radha ([maheshraj.mahedran@yahoo.com](mailto:maheshraj.mahedran@yahoo.com))  
Subject: **Uncovering the Secrets of the Fovea**

Researchers have examined the cellular underpinnings of the fovea in an attempt to explain the differences between its function and that of the peripheral retina.

Research published in *Cell* assessed how varying cellular and circuit mechanisms account for the different perceptual sensitivities of the fovea and peripheral retina. Understanding how the fovea works is important in developing methods to correct central vision loss, including efforts to design visual prosthetics.

However, there are challenges to examining how the fovea works on a cellular circuit level because the fovea is absent in most mammals. The fovea provides more than half of the visual input from the eyes to the brain and is pivotal for detailed tasks like reading. However, compared to the peripheral vision, the fovea has less sensitivity to rapid variations in light input.

The research suggests that these perceptual differences come from cone photoreceptors in the fovea. Researchers from the University of Washington School of Medicine and Howard Hughes Medical Center found that the responses of cone photoreceptors in the fovea are two-fold slower than those in the peripheral retina. While synaptic inhibition affects the response of midget ganglion cells in the periphery, it has little effect on these cells in the fovea. The study highlights that while the fovea and peripheral retina share similar core circuit architecture, they have profound functional differences.

For the complete article, please visit: <https://www.aop.org.uk/ot/science-and-vision/research/2017/04/03/uncovering-the-secrets-of-the-fovea>

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Date: 16 April, 2017  
From: Sandhya Shekar ([sandhya.shekar@indiavisioninstitute.org](mailto:sandhya.shekar@indiavisioninstitute.org))  
Subject: **CooperVision Launches “World First” Digital CL**

CooperVision has launched what it describes as “the world’s only contact lens with digital zone optics”. Joe Tanner, Professional Services Manager at CooperVision established consumer demand for the contact lens which has been purpose designed for patients who use digital devices at least two hours per day.

Mr. Tanner described the Biofinity Energys lens as being the same as the Biofinity except that it has been enhanced from the optical design perspective: Biofinity Energys has digital zone optics which *consists* of multiple front-surface aspheric curves. These aspheric curves are employed across the entire optic zone to distribute power evenly, simulating more positive power in the centre of the lens. This helps ease the accommodative burden without impacting distance vision.

Additionally, this new contact lens features the proven Biofinity material locks water molecules inside the lens so the patient’s eyes stay moist and comfortable, even when they are staring at a digital screen.

Prior to its official launch to market, Biofinity Energys was trialled by 13 optometrists in Australia and New Zealand who were each asked to fit 20 existing patients who used digital devices for two or more hours a

day. The trial ran from October 2016 to 28 February 2017 and interim data from nine of the optometrists who completed a survey at its conclusion was presented. While small, the survey found the majority reported excellent vision, excellent centration and movement, and good comfort.

In a separate study carried out overseas, eight out of 10 wearers agreed that Biofinity Energys lenses with digital zone optics lens design made their eyes feel less tired; eight out of ten reported their eyes didn't feel strained and nine out of ten agreed their lenses made them "feel good".

For the complete article and video, please visit: <http://www.mivision.com.au/cooper-vision-launches-world-first-digital-cl/>

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Date: 13 April, 2017

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

Subject: **LV Prasad Eye Institute Sets World Record in Corneal Transplants**

The L.V. Prasad Eye Institute (LVPEI) has claimed to have become the first in the world to perform over 2,000 corneal transplants in a year.

It performed 2,043 corneal transplants in 2016-17, setting the record for the highest ever corneal transplant surgeries in the world by a single centre. Since its inception, the institute's Hyderabad campus has so far notched up 23,901 corneal transplant surgeries, LVPEI said in a statement.

The Ramayamma International Eye Bank at the campus harvested 7,166 corneas this financial year and distributed 3,810 corneas to corneal surgeons across the country. LVPEI Founder and Chair Gullapalli N. Rao said the institute had so far done nearly 24,000 corneal transplants, the highest anywhere in the world. He noted that Hyderabad is the only city and Telangana the only state in the country to have a no-waiting list for corneal transplants.

"We have trained two-thirds of all corneal transplant surgeons in the country, which is 300 of the 450 corneal transplant surgeons India has. Our country needs more trained surgeons, as currently we are doing 30,000 corneal transplants per year against 1 lakh to be done, which needs 20,000 corneal surgeons," said Dr Rao.

For the complete article and video, please visit:

<http://www.thehansindia.com/posts/index/Telangana/2017-04-12/LV-Prasad-Eye-Institute-sets-world-record-in-corneal-transplants/292924>

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Date: 15 April, 2017

From: Ajit Moses ([ajitmoses@gmail.com](mailto:ajitmoses@gmail.com))

Subject: **Immediate hire of Optometrists to work out of Hyderabad**

Pellucid Networks an industry-leading cloud ophthalmology software development company is looking for business-minded professionals, with successful sales track records who strive for organizational success, seek career growth, and desire the ability to own one's own income potential. Healthcare IT software sales experience is a plus.

The ideal candidate will possess a 3 year degree or equivalent and a minimum of 3 years of experience in business to business sales. Previous experience in the healthcare software industry is ideal. Candidates must live in the territory and be willing to do overnight travel. A strong initiative with exceptional

customer service, presentation, and communication skills is desired. Previous success attaining and exceeding sales goals is a plus. Previous experience as an OT/PT/RN is a plus. Proficiency in Microsoft Office Products (Word, Excel, Power Point, etc.) as well knowledge of CRM software is helpful.

For more information, please visit: <http://pellucidinc.com/careers/>

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<http://www.indiavisioninstitute.org/optdistlist.php>

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