

Optometry DistList

Instance 2017: 40

Friday, 13 January 2017

Today's subjects

- Revolutionising Teaching with the Blend of Human & Technology!!!
- Indian Scientists' Novel Approach to Diagnose Retinal Diseases
- Diabetic Eye-Screening System Edges toward Market
- Charitable Students Set Their Sights on Helping in Africa-Collecting Old Spectacles
- The 2nd World Congress of Optometry - September 11-13, 2017-*Super Early Bird Discount Ends on 22 Jan 2017*
- Research Optometrist Position for the Myopia Laboratory at LVPEI

Date: 03 January, 2017

From: Runa Mazumder (runa_talukdar@rediffmail.com)

Subject: **Revolutionising Teaching with the Blend of Human & Technology!!!**

Blended learning refers to the use of human & technology to create an easy & interesting atmosphere of teaching & learning. Here, in this article I will briefly introduce the readers to a few tools that will help the optometry educators in re-modelling the education system.

- 1. Evernote:** Evernote is computer software designed for digital note taking and storage. Notes can be made with Web pages, photographs, voice memos or original typed documents. The software sorts, tags, edits and organizes notes to increase efficiency.
- 2. Explain Everything:** the most effective iOS or android app for the students, where tapping on whiteboard icon can handwrite, draw diagrams, add texts, images, videos can be saved to camera rolls & then shared & swapped between students.
- 3. Show Bie:** it is a free app that makes it easy to collect & review student work anywhere.
- 4. Socrative:** is a very useful free cross-platform app that allows teacher to ask questions. All answers come directly to iPad & can upload to spread sheet, setting up quiz etc.
- 5. Near Pod:** an application that allows teachers to create and share interactive lessons with their students. Teachers can download multimedia lessons from the Nearpod content store or create their own. Lesson content can include previously created slides, embedded videos, audio, images, text, PDFs, etc.

Optometry being a health care profession involves learning from live cases rather than books. Hence if we can capture interesting clinical cases from our daily practice & use those in teaching by utilising the technical applications as mentioned above, we can transform the learning space in an effective knowledge delivery system.

For further references please visit: www.wc3shownotes.com

Date: 08 January, 2017

From: Sandhya Shekar (sandhya.shekar@indiavisioninstitute.org)

Subject: **Indian Scientists' Novel Approach to Diagnose Retinal Diseases**

The researchers from IISER, Kolkata, L.V. Prasad Eye Institute, Hyderabad, and BARC, Visakhapatnam used the retinal data captured by a well-established imaging method in ophthalmology (optical coherence tomography or OCT) and applied an algorithm based on a statistical biomarker tool for early detection of diabetic macular edema.

Biological tissues have complex geometrical patterns, which are called multifractals. "The OCT images are light intensity-based and so the multifractal information gets hidden," says Dr. Ashutosh Richhariya from Hyderabad's L.V. Prasad Eye Institute and one of the authors.

"As the disease progresses there is a change in the refractive index of the medium which gets recorded in the OCT images. And this data, which is hidden in the OCT images, can be extracted using multifractal detrended fluctuation analysis (MFDFA)," says Sabyasachi Mukhopadhyay from the Indian Institute of Science Education and Research (IISER), Kolkata, and one of the authors of the paper.

Using the software, the researchers are able to find a peak at the junction between two layers from the refractive index data extracted from the OCT images. The thickness of a layer can be calculated by measuring the distance between two successive peaks. When the thickness of a layer becomes more as the disease progresses the distance between two successive peaks increases.

"The two-dimensional OCT images have information on depth and lateral direction depth. We are interested in depth-related information. So we first unfolded the two-dimensional image into one-dimensional images and analysed these using multifractal detrended fluctuation analysis (MFDFA)," says Nandan Kumar Das from IISER, Kolkata, and the first author of the paper.

For the complete article, please visit: <http://www.thehindu.com/sci-tech/science/Indian-scientists%E2%80%99-novel-approach-to-diagnose-retinal-diseases/article17004895.ece>

Date: 02 January, 2017

From: Rija Maharjan (rizamaharjan67@gmail.com)
Subject: **Diabetic Eye-Screening System Edges toward Market**

A new \$1.5 million federal grant is pushing VisionQuest Biomedical LLC's rapid retinal screening technology for diabetics closer to commercial sales in the U.S.

The Albuquerque Company, which launched in 2008 with advanced diagnostic software developed at the University of New Mexico, expects to begin its first clinical study next year for U.S. Food and Drug Administration approval of its technology. The company achieved government certification for its retinal-screening system in Mexico this year, and it is now using it to screen thousands of diabetic patients in Monterrey in partnership with the Mexican chain of diabetes service offices Clinicas Del Azúcar.

The company created two software technologies: one to make sure retinal images are up to the quality standards needed for analysis and another to rapidly screen those images to determine whether a patient shows signs of eye damage from diabetes and needs to be seen by an ophthalmologist.

"Our patented technology detects specific features in the retina to identify which ones have retinal disease that can lead to blindness," said Simon Barriga, VisionQuest president and chief research scientist. "The objective is to screen out the patients who don't need to see an ophthalmologist, which accounts for about 80 percent of diabetics, and rapidly identify the 20 percent who have developed advanced stages of disease and require intervention."

VisionQuest's software will measure sense deterioration with infrared imaging based on how well a patient regains feeling in his or her feet after a cold patch is applied to the skin.

The company recently received a \$1.5 million grant to further develop that technology. It will launch a clinical study with 400 patients next year at the UNM Health Sciences Center.

Through its partnership with Clinicas Del Azúcar, VisionQuest's system has been used to screen about 7,000 diabetes patients this year. It will examine about 10,000 more next year, said Gilberto Zamora, VisionQuest's director of clinical operations. The system has proved 100 percent accurate in identifying patients with potential eye damage who need to see an ophthalmologist, Zamora said. And it's cut the eye-care workload at the Mexican clinics by 50 percent, allowing the staff to see a lot more patients.

For the complete article, please visit: <https://www.abqjournal.com/919152/diabetic-eyescreening-system-edges-toward-market.html>

Date: 11 January, 2017

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

Subject: **Charitable Students Set Their Sights on Helping in Africa-Collecting Old Spectacles**

CHARITABLE students have their sights firmly fixed on a project to improve people's vision in Africa. Barnard Castle School's charities committee has been drafted in to help a **Spectacle Recycling Project** for residents of Saiwa Swamp National Park, Kenya. They have begun collecting old spectacles and glass cases which will be donated to a village eye clinic. Students are also appealing to local opticians for help in assessing the prescriptions and labeling the glasses.

"I've kept in touch with a friend I made over there, Maurice Wanjala, and I hope to take out a case full of old specs when I visit him at Easter, a recce for a possible school expedition to the national park.", said Barnard Castle School biology teacher Sam Forsyth. "Maurice is working with a local optician to set up an eye clinic in the village and any glasses we can collect will be really useful. Ultimately, they hope to set up a business making their own spectacles." School charities committee member Ardin Jacques said: "The specs initiative will have an incredible impact on people's lives by harnessing something we often leave unused, lying around the house."

For the complete article, please visit: <http://neconnected.co.uk/charitable-students-set-sights-helping-africa/>

Date: 13 January, 2017

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

Subject: **The 2nd World Congress of Optometry - September 11-13, 2017- Super Early Bird Discount Ends on 22 Jan 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!

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: 11 January, 2017

From: Shrikant Bharadwaj (bharadwaj@lvpei.org)

Subject: **Research Optometrist Position for the Myopia Laboratory at LVPEI**

LVPEI-BHIOVS is looking for a “passionate” research Optometrist to work at the new Myopia Lab for research projects from April 2017. The research will involve both basic and applied aspects of myopia mainly investigating epidemiology of myopia, pathogenesis/causation of myopia and anti-myopia strategies. The position is suitable for someone who is planning to pursue research in vision science as career, and is willing to do some administration in the lab.

Dr Pavan Verkicharla will be joining LVPEI, Hyderabad soon and will be setting up this Myopia and Refractive Error Development laboratory at KAR campus.

Applicants with passion for research, prior experience of handling a research project and statistical software such as SPSS/STATA, excellent verbal, written and interpersonal skills will be preferred, but not a necessity.

The research Optometrist is expected to:

- Join the lab from 1st April 2017 and work in the same lab for a minimum of 2 years
- Be responsible for the overall operation of several research studies conducted in the lab
- Coordinate research through patient/participants recruitment, scheduling and retention of study subjects
- Perform eye examinations including study related testing/procedures using research equipment at lab
- Perform data collection (prospectively and retrospectively), synthesize and analyze (using excel, SPSS/STATA). Should be willing to use and learn Matlab computer programming when needed.
- Participate in study meetings (in-person and by phone) as and when required
- Compose and edit material for publications and presentations

Interview/contact details: Interested candidates may apply by sending their latest CV and cover letter to Dr Shrikant Bharadwaj at bharadwaj@lvpei.org or Dr Pavan Kumar Verkicharla at optompavan@gmail.com by 1 Feb 2017 to schedule an interview. Date of interview will be communicated via email to all applicants.

India Vision Institute
Plot No 212, No 45, Palkalai Nagar,
7th Link Road, Palavakkam,
Chennai - 600041, TN, India
Tel. No. : +91 - 44 - 24515353

Email: ivi@indiavisioninstitute.org
Web: www.indiavisioninstitute.org

Note:

To subscribe to OptDistList, please send an email to info@indiavisioninstitute.org with the subject line titled 'SUBSCRIBE'

To unsubscribe from OptDistList, please send an email to info@indiavisioninstitute.org with the subject line titled 'UNSUBSCRIBE'.

Administrivia:

The OptDistList is a service provided by the India Vision Institute (IVI)

DistList postings are for informational purposes only and do not imply endorsement by IVI

Instructions for DistList postings:

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

DistList Archives:

All instances of the DistList are available (both for browsing by whole items and searching for individual messages): <http://www.indiavisioninstitute.org/optdistlist.php>
