Optometry DistList
Instance 2018:65
Monday, 18 June 2018

# Today's subjects

- OCI registration mandatory for applying COE at Australia & New Zealand
- Position vacant at Operation Eyesight for Program Officer
- Contact lens for Color blindness
- 3D-printed Human Corneas AAO
- SynergEyes and BHVI join forces for specialty contact lens development

Ocular prosthesis workshop at Susrut Eye Foundation

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Date: 05 June 2018

From: Optometry Council of India (info@optometrycouncilofindia.org)

Subject: OCI registration mandatory for applying COE at Australia & New Zealand

Optometry council of Australia and New Zealand (OCANZ) has announced in assessing applicants from India for eligibility to the Competency in Optometry Examination (COE), OCANZ does require an evidence of being registered with the Optometry Council of India (OCI).

OCANZ also has a Committee who assess the application in detail to ensure that thy have evidence of successful completion of a course in optometry of at least 3 years full-time study followed by one year (at least 400 hours) of supervised clinical practice.

For more information, please visit www.ocanz.org

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Date: 06 June 2018

From: Dr Santosh Moses (<u>mosess@operationeyesight.com</u>)

Subject: Position vacant at Operation Eyesight for Program Officer

Operation Eyesight Universal has a job vacancy for Optometrist.

**Position**: Program Officer **Location**: Hyderabad

**Education**: Optometry and MHM/MPH **Experience**: Minimum 2-3 years

**Other requirements:** Ability to speak fluent in English, Hindi and Telugu as well.

Interested candidates kindly forward your updated resume to Mr. Anup Zimba

Email Id: zimbaa@operationeyesight.com)

Contact Number: 919775992525

Date: 07 June 2018

From: P. Gouri Pravalitha (gouripravalitha.p@gmail.com)

Subject: Contact lens for Color blindness

Color vision deficiency (CVD) is an inherited genetic ocular disorder. While no cure for this disorder currently exists, several methods can be used to increase the color perception of those affected.

The photoreceptor cones are divided into three groups, responsible for short wavelengths (blue), medium wavelengths (green), and long wavelengths (red). When identifying a color in normal eyes, these cones function according to their corresponding activation thresholds. The combination of the different activation thresholds for the three types of cones is then processed by the brain and the corresponding color is perceived. Color filtering glasses can be used which are based on Bragg filters. While these glasses are effective, they are high cost, bulky, and incompatible with other vision correction eyeglasses. Here, a cost-effective contact lens was created for CVD management. The possibility of using contact lenses for CVD management is of interest particularly because of their ability to provide the entire corrected field of view and avoid obstructions from uncorrected peripheral vision inevitable in the case of glasses.

In this work, a rhodamine derivative is incorporated in commercial contact lenses to filter out the specific wavelength bands ( $\approx$ 545–575 nm) to correct color vision blindness. The biocompatibility assessment of the dyed contact lenses in human corneal fibroblasts and human corneal epithelial cells shows no toxicity and cell viability remains at 99% after 72 h

A color filtering contact lens was successfully fabricated by submerging them in Atto 565 dye for 30 s. Furthermore, the concentration of the dye used could be controlled to accurately provide a high level of customization of the process. Due to its customizability, low cost of the dye, and the ease of the production process, these dyed contact lenses can be promising for CVD management. The fabricated contact lens is a step forward in the development of wearable devices for the management of color vision deficiency.

To read full article, please visit:  $\underline{\text{https://doi.org/10.1002/adhm.201800152}}$ 

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Date: 09 June 2018

From: M.Rakesh (rakeshm950@gmail.com) Subject: 3D-printed Human Corneas – AAO

Researchers from Newcastle University have successfully created viable corneas using a 3D printer loaded with a unique bio-ink. The printed tissue, which contains live stem cells, has the potential to address the chronic shortage of donor corneas worldwide.

Led by Che Connor, PhD, the team first had to formulate a bio-ink that could sustain the growth of human corneal stromal cells. The final product—a combination of alginate and collagen—is both soft enough to squeeze through a 3D printer nozzle yet stiff enough to maintain its printed shape.

Next, using dimensions obtained from a healthy cornea, the scientists employed a low-cost 3D printer to emit the bio-ink in concentric circles. Within 10 minutes, the printer produced a structure mirroring a human cornea.

The live cells inside the printed corneas survived for at least 1 week. After 1 day, cell viability was 92% and remained above 80% for 7 days. "This builds upon our previous work in which we kept cells alive for weeks at room temperature within a similar hydrogel. Now we have a ready to use bio-ink containing stem cells allowing users to start printing tissues without having to worry about growing the cells separately," explained Dr. Connor, adding that the corneas could be custom-printed to match each patient's specific needs.

Date: 13 June 2018

From: Jenifer.G (mariajenifer76@gmail.com)

Subject: SynergEyes and BHVI join forces for specialty contact lens development

SynergEyes, the leading hybrid specialty contact lens company, announces a new partnership with the Brien Holden Vision Institute (BHVI) to deliver advanced, customized vision correction for myopes and presbyopes. The exclusive worldwide licensing agreement will enable the manufacturing of design technologies developed by BHVI, augmenting the SynergEyes presbyopic package by offering the latest designs on the hybrid contact lens platform. "Working with a recognized worldwide leader like the BHVI, we plan to bring an extended depth-of-focus lens design onto the hybrid platform to the global market" says President and CEO of SynergEyes.

Date: 15 June 2018

From: P. Gouri Pravalitha (gouripravalitha.p@gmail.com) Subject: Ocular prosthesis workshop at Susrut Eye Foundation

The Susrut Eye Foundation & Research Centre and ASCO are organising a five-day workshop on Ocular Prosthesis from July 2- July 6, 2018.

The workshop in the arts and science of Ocular Prosthesis will include didactic lectures, demonstrations and guided hands on training for all the participants. It will provide an enriching experience to the initiated and fresher's alike.

Topics:

- Pearls of fitting Custom made ocular prosthesis
- Managing/Handling trouble shootings and complications of sockets
- Hands-on training for fabricating custom made ocular prosthesis
- Live patient consultation for fitting custom made ocular prosthesis.

Conducted By: ASCO

Date: Monday, July 2, 2018 to Friday, July 6, 2018

Venue: Susrut Eye Foundation & Research Centre, Kolkata

### For full details:

https://www.iapb.org/news/ocular-prosthesis-workshop-at-susrut-eye-foundation/

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