One day CRIKC workshop on Technical Advances in Retinal Imaging

Avijit Banik

It is heartening to mention here that the Chandigarh Region Innovation & Knowledge Cluster (CRIKC) is accelerating its programs to "promote and sustain excellence in research" in

tricity. The CRIKC initiative (<http://crikc.puchd.ac.in>) included a 1 day workshop on Technical Advances in Retinal Imaging held Under on 11th February 2015 in Zoology auditorium, Punjab University. This was an appropriate opportunity for neuroscientists and students related to the field to learn and share knowledge about advanced tools in electrophysiology. Lectures were arranged by experts on retinal electrophysiology followed by live demonstration on Electroretinogram using mice and rats. The instrument is designed to record electrical signals released by retina in visible light exposure and measure these signals into electroretinograph. This gives one a valuable piece of information on retinal function at the

time of vision loss and effect of novel treatments in rescuing the same.

The students and faculties from Punjab University, PGIMER, NABI, IISER and IIT-Ropar attended the workshop and discussed the applications, translation potential, limitations and advances in the field apart from the hardware and software of the instrument demonstrated. Dr. Scott Johnston from Phoenix Research Labs, California USA demonstrated the Electroretinogram (ERG), its mechanical and functional aspects. The instrument was assembled in the workshop and there were performance on ERG recoding on anesthetized rodents before and after dark adaptation. Presentations included the application of this instrument in basic research followed by another one to share her work Retinal ischemic mouse model using Electroretinogram.

The workshop went on till 4 PM and there were discussion between Dr. Scott and other faculties and students that how this instrument can add up into their cur-

rent research objectives. Surgeons from Advance Eye Centre, PGIMER also shared their experience on the instruments used for human eyes and clarified the parameters which can be recorded in the current instrument for experimental animals to obtain signals from different layers of retina. During lunch, it was more interactive discussion between Dr. Scott and IIT-Ropar faculties where they explored the possibilities of manufacturing this kind of instruments in India. After all the Make-in-India initiative from current government rightly falls on the shoulders of these eminent Engineers who are focused and motivated to make a mark in our scientific community. Overall the workshop was successful and one of its kind and I thank CRIKC and Annals team for offering this unique platform to us.

Avijit Banik, Ph.D

Senior Demonstrator, Neuroscience Research Lab, PGIMER, Chandigarh, India

doi : 10.5214/ans.0972.7531.220411