ICMR International Travel Support for Non-ICMR Scientist

No. 3/2/TG-48(6)/HRD-2013

❖ Name & Designation

Address

: Dr. Zia Chaudhuri, Professor

: Dept. of Ophthalmology.

LHMC & Associated Hospitals, University of Delhi,

New Delhi-110001

Name of the International Conference: 40th Annual Meeting of the American for Pediatric

Seminar/Symposium/Workshop

Ophthalmology and Strabismus-2014

Title of the abstract accepted

: Horizontal rectus muscle pulley malposition and pattern strabismus in Congenital Pulley Heterotopy

❖ Date & Venue

: 2-6th April, 2014, Los Angeles, CA, USA

Money sanctioned Money reimbursed

: Rs 96,528/-: Rs 92.740/-

Participation Report

40TH ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF PEDIATRIC OPHTHALMOLOGY & STRABISMUS (April 2-6, 2014) at Palm Springs, CA, USA

The annual meeting of the AAPOS is the global lead conference in the sub-speciality of pediatric ophthalmology and strabismus, where current, innovative and cutting edge technology and practices are presented.

The CME accredited scientific sessions comprised 34 papers, 87 interactive posters, named lectures (2), symposiums (2) and workshops (28) spread over 5 days. The conference was well attended by participants from various countries from North and South America, Europe, Africa and South Asia including India. Besides myself, there was participation of colleagues from Hyderabad, India.

The academic highlights comprised latest innovations in binocular vision, amblyopia and pediatric visual screening, strabismus surgery, pediatric cataract surgery, retinopathy of prematurity, pediatric retinal and optic nerve diseases, pediatric ocular trauma, autism, dyslexia, genetics, pediatric neuro-ophthalmology and biophysics of extra-ocular muscle function. This last part was absolutely cutting edge, comprising current experiments performed in the Ocular Motility Lab at the Jules Stein Eye Institute, UCLA, CA under the supervision of Professor Joseph L Demer (where I have also undergone a 13 month advanced fellowship on learning MRI in strabismus) on extra-ocular muscle compartmentalization. This was presented in the form of a workshop on "Muscle Compartmentalization: Twice the Muscles, 3 times the action". Most of the presented work has huge trend changing applications in the management of conditions coming under the preview of pediatric ophthalmology and strabismus.

My work under the supervision of Professor Demer, performed while I was a BOYSCAST Fellow under him, was accepted as a poster entitled "Horizontal Rectus Muscle Pulley Malposition and Pattern Strabismus in Congenital Pulley Heterotopy (CPH) in this conference. I am continuing this work as a collaborative project with Dr Demer in India under the aegis of an Indo-US NIH-DBT grant on "Effect of Cranial Surgery in Strabismus in Craniosynostosis" The above poster has been submitted under the same title to JAMA Ophthalmology for consideration for publication.

PARTICIPANT'S CONTRIBUTION TO THE CONFERENCE/ TRAINING / WORKSHOP

Dr Zia Chaudhuri, MS, FRCS(Glasg) Professor of Ophthalmology Lady Hardinge Medical College & Associated Hospitals, University of Delhi, New Delhi, India

As a participant in the 40th Annual Meeting of the AAPOS, my work on pattern strabismus in congenital pulley heterotopy, which comprises patients with craniosynostosis amongst others, emphasized a neuro-anatomical basis for strabismus in these patients because of incyclotorsion or excyclotorsion of the extraocular muscle (EOM) pulley array. This has translational applications for strabismus surgery as it implies that the ocular misalignment is not due to oblique muscle overactions and is hence unlikely to get corrected by surgeries on these muscles (as is usually done in these cases). This has been submitted to JAMA Ophthalmology for consideration for publication

Craniosynostosis with strabismus forms the main case group of the Indo-US NIH-DBT study on "Effect of Cranial Surgery on Strabismus in Craniosynostosis" of which I am an investigator and in I am performing functional dynamic MRI. The results presented in the AAPOS conference in an essentially Caucasian population are likely to get validated in a south Asian population as a result of this Indo-US study. In pursuance of further upgradation of skills in high resolution MRI in strabismus as a mandate of the mentioned project, the AAPOS conference was succeeded by upgraded training in high resolution surface coil MRI from April 7-16, 2014 under the direct supervision of Professor Demer at the Jules Stein Eye Institute, UCLA, Los Angeles, CA, USA.

I also participated as a guest faculty speaker on "Rectus Muscle Plication: A potentially reversible, vessel sparing alternative to resection" at the pre-AAPOS Leonard Apt Meeting on Advanced Topics in Pediatric Ophthalmology and Strabismus at the Jules Stein Eye Institute, UCLA, Los Angeles, CA, USA on April 1, 2014 en route to Palm Springs, CA, USA for the AAPOS conference. This trend changing work, again performed during my BOYSCAST fellowship duration at JSEI, UCLA has been published as:

Chaudhuri Z, Demer JL. Surgical Outcomes Following Rectus Muscle Plication: A Potentially Reversible, Vessel-Sparing Alternative to Resection. JAMA Ophthalmology 2014 March 27 doi: 10.1001/jamaophthalmol.2013.8188. [Epub ahead of print]

Overall, the period between April 1 to 16, 2014 has been extremely beneficial academically and should result in further cutting edge productive work in the coming year.

Dr. Zia Chaudhuri, MS, FR. Jogy
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