38th Asia-Pacific Academy of Ophthalmology Congress

APAO

KUALA LUMPUR, MALAYSIA

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Reconnect & Collaborate

ASIA-PACIFIC ACADEMY OF OPHTHALMOLOGY®

LDP
APAO Leadership Development Program

APAO LEADERSHIP DEVELOPMENT PROGRAM (LDP)

Class XI (2020-2021)
February 25, 2023

ABSTRACT BOOK

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LDP Class XI (2020-21)

Program Outline

Orientation Class

Postponed by the COVID-19 pandemic, the Orientation Class of the APAO Leadership Development Program Class 2020-21 was held on September 5 and 11, during the first-ever APAO 2021 Virtual Congress. Four sessions included program introduction, project management, advocacy and strategical planning were facilitated by the LDP Faculties.

Master Class

The Leadership Master class (previously called Mid-term Forum) was conducted every other month in form of 2.5-hour online session, in total, 5 sessions. Twenty participants benefited from the Program.

November 21, 2021	Master Class 1: Getting the Team Together
January 16, 2022	Master Class 2: Leading Yourself
March 13, 2022	Master Class 3: Getting Your Message Across
May 15, 2022	Master Class 4: Getting the Job Done
August 7, 2022	Master Class 5: Insights Discovery: Communicating in Colour

Graduating Class

Nineteen participants will present their self-initiated LDP Projects on February 25 at the APAO 2023 Kuala Lumpur Congress to graduate from the Leadership Development Program.

LDP Class XI (2020-21)

Our Graduates

Aniruddha AGARWAL
(United Arab Emirates)

Rachelle ANZURES
(Philippines)

Chaow CHAROENKIJKAJORN
(Thailand)

Jason CHENG
(Australia)

Helena HURAIRAH
(Brunei Darussalam)

Ben LIMBU
(Nepal)

Kiet Phang LING
(Malaysia)

Anu MANANDHAR
(Nepal)

Elenoa MATOTO-RAIKABAKABA
(Fiji)

Alex Lap Ki NG
(Hong Kong, China)

Eli PRADHAN
(Nepal)

Irum RAZA
(Pakistan)

Bhupesh SINGH
(India)

Xinyi SU
(Singapore)

Shaoying TAN
(Hong Kong, China)

Raymond L.M. WONG
(Hong Kong, China)

Chen ZHAO
(China)

Varanisese Rorogasa NAVIRI
(Fiji)
Resumed from LDP 2019-20

Yasuo YANAGI
(Japan)
Resumed from LDP 2019-20

LDP Abstracts

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3	Chaow	CHAROENKIJKAJORN	"Clinical Optics: The Lecture Note": A Simple and Free Learning Material for Thai Ophthalmology Residents
4	Jason	CHENG	Orthoptist Led Stable Eye Disease Monitoring in Southwest Sydney
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17	Chen	ZHAO	Promotion of China Pediatric Disease Investigator Group
18	Varanisese	NAVIRI	Transitioning Post Graduate Training at Pacific Eye Institute / Fiji National University (FNU)
19	Yasuo	YANAGI	YO Educational Symposium

Name	**Aniruddha AGARWAL**
Country	United Arab Emirates
Project Title	**Development of a Standard Protocol for Quantification of the Choroid Using Optical Coherence Tomography Angiography (OCTA)**
Mentor	Dr Vivek DAVE
Abstract	**Purpose:** To develop a standard automated protocol for calculation of quantitative indices in choriocapillaris flow deficits (CFD) in patients with ocular inflammation (uveitis). To develop a freely available imaging algorithm to quantify the CFD for use by other optometrists/fellows/clinicians. **Methods:** Study Design: Prospective study with planned intervention: Consecutive eyes of patients with choroiditis (posterior uveitis) will be included. OCTA of the macula will be analyzed for the subjects during active disease. Choriocapillaris will be analyzed using an identification algorithm. The algorithm will test different thresholding protocols and choriocapillaris slab positions from the retinal pigment epithelium (RPE). Data Collection Plan: The study will identify the imaging algorithm that provides the most consistent choriocapillaris quantitative data, which will be freely available as a plugin for use by other investigators. Data Analysis Plan: We will use GraphPad Prism for statistical analysis. We will use non-parametric statistics for testing means (Mann-Whitney U test) for quantitative data. Categorical data with Fischer's test. P value of <0.05 will be considered statistically significant. **Results:** Among the 46 eyes of 46 patients with posterior uveitis enrolled, the quantification of the choroid was performed by using the NiBlack, Phansalkar and Otsu's thresholding algorithm with various RPE offsets. The quantification of the choriocapillaris was best observed using the Phansalkar's thresholding algorithm by keeping the choriocapillaris slab thickness of not more than 8 microns, and the RPE offset of 16 microns. The imaging algorithm could be automated and developed into a freely distributable macros function. **Conclusion:** Standardized quantification of the choroid and choriocapillaris is possible using OCTA imaging. This helps improvement in the understanding of the pathology of the choroid and precise measurements by ophthalmic photographers, technicians, residents, fellows, and other ophthalmologists.

Name	**Rachelle ANZURES**
Country	Philippines
Project Title	**The Development of Retinopathy of Prematurity Screeners and Treatment Providers Registry: A Pilot Study**
Mentor	Prof Muhammad MOIN
Abstract	**Purpose:** The project aims to provide a registry of ophthalmologists who can perform the retinopathy of prematurity (ROP) screening and treatment in the Philippines. The primary utility of this registry is to give accessible information to the pediatricians, general ophthalmologists, parents, and other stakeholders. **Methods:** The project is a descriptive, cross-sectional study. Study population will include practicing retina specialists (members of the Vitreo-Retina Society of the Philippines) and pediatric ophthalmologists (members of the Philippine Society of Pediatric Ophthalmology and Strabismus) in the Philippines. Descriptive outcome will include the distribution of ROP screeners and treatment providers as to demographics and locality. The study will utilize convenience sampling and data will be analyzed using descriptive statistics. **Results:** Respondents in the study is composed of 50% retina specialists. All of the study population are screeners and 70% perform ROP treatment. The majority of the screeners and treaters are located in the urban areas. **Conclusion:** The registry of ROP screeners and treaters in the Philippines is the beginning of efforts to address the lack and maldistribution of ROP services in the country. Aside from providing stakeholders valuable information on where to avail ROP services, the registry has also identified areas where personnel placement endeavors should be done.

Name	**Chaow CHAROENKIJKAJORN**
Country	Thailand
Project Title	**“Clinical Optics: The Lecture Note”: A Simple and Free Learning Material for Thai Ophthalmology Residents**
Mentor	Dr Linda TSAI
Abstract	**Purpose:** Due to the complexity and a wide range of content, clinical optics was found to be challenging for many ophthalmology residents. As English is not a native language in our country, some learners find it hard to follow the content of English written books. The goal of this project is to create a learning material that is simple, concise, and easily accessible to enhance clinical optic learning in Thai ophthalmology residents. **Methods:** A book with a total of 204 pages was created entirely by the author, named “Clinical Optics: The Lecture Note”. All figures were drawn manually with an iPad. The content was made into an e-book format. The book was then shared on social media platforms, including Facebook and Instagram, for free download. **Results:** The book has earned over 1,200 downloads to date with an increasing number. After its release, the project received much support from Thai organizations, including the Clinical Optic and Refraction Ophthalmologists Society of Thailand (CROST) which provides peer-review from 3 experts in the field, to ensure that the information is accurate and up to date. The book has also got funding from the Royal College of Ophthalmology of Thailand (RCOPT) for publishing a total of 270 physical copies. The project has been getting amazing feedback from Thai learners. **Conclusion:** The book closes the language barrier gap and helps residents in understanding the material in clinical optics. The e-book format makes the book widely accessible, and extremely easy to share with others. The project was made better with support from Thai organizations.

Name	**Jason CHENG**
Country	Australia
Project Title	**Orthoptist-Led Stable Eye Disease Monitoring in Southwest Sydney**
Mentor	Prof Madhuwanthi DISSANAYAKE
Abstract	**Purpose:** Set up and evaluate orthoptist-led stable eye disease monitoring clinics in order to improve hospital ophthalmology outpatient capacity, while maintaining high quality and safe patient care under the supervision of ophthalmologists. **Methods:** Prospective evaluation of the orthoptist-led stable glaucoma monitoring and hydroxychloroquine (HCQ) eye screening clinics. Protocols and flowchart guidelines were set up in 2020-2021 but implementation was disrupted by COVID-19related lockdown. Stable glaucoma monitoring clinic inclusion criteria were mild and stable primary open angle glaucoma was suitable for 6 monthly visual field assessment. A number of investigations would be performed, including visual acuity, intraocular pressure, visual field assessment and OCT disc. The results of the investigation would be reviewed by an ophthalmologist at a later time. Patients identified as high risk would be seen by the registrar on the same day. The HCQ standards were based on the guidelines of the American Academy of Ophthalmology (AAO) – ”Recommendations on screening for chloroquine and hydroxychloroquine retinopathy.” The criteria for the HCQ clinics were that all patients would be assessed for risk factors for maculopathy and undergo investigations set out in the guidelines and those with abnormalities or progression would be discussed with the ophthalmologist. **Results:** Twenty-seven patients have been seen in the stable glaucoma monitoring clinic of which 5 were deemed inappropriate referrals. Twenty were correctly assessed to be stable and followed up in 6 months. Two patients were found to suggestive of progression and were referred to the glaucoma clinic within 3-6 months as per guidelines. Forty-five patients were seen at the HCQ eye screening clinics. Twenty-six patients with risk factors for HCQ retinopathy and were appropriately discussed with the consultant. There was 100% concordance between orthoptist screening and AAO guidelines. **Conclusion:** Orthoptist-led stable eye disease monitoring clinic has high adherence to guidelines and potential to divert stable patients away from outpatient clinics to improve capacity. Further expansion of these clinics and analysis of cost effectiveness and patient satisfaction is required.

Name	**Helena HURAIRAH**
Country	Brunei Darussalam
Project Title	**A Study to Assess Clinicians' Motivation Towards Clinical Teaching and Its Barriers**
Mentor	Dr Vivek DAVE
Abstract	**Purpose:** 1. To develop and validate a questionnaire to assess clinicians' motivations to teach. 2. To assess clinicians' motivations to teach students and trainees. 3. To identify barriers to delivering effective teaching. **Methods:** In this cross-sectional study, a self-administered questionnaire assessing clinicians' motivation to teach was developed in collaboration with a local university in Brunei Darussalam. This was validated in a pilot study before administering it to eligible participants i.e., clinicians involved in teaching medical students and trainee doctors. The questionnaire assessed (i) motivation to teach; (ii) barriers to teaching and (iii) interest to participate in teaching programs. The study results were then analyzed with the aid of a local statistician. **Results:** At the time of abstract submission, the questionnaire tool had completed validation in a pilot study and had been administered to identified clinicians involved in teaching and training. **Conclusion:** This study will provide insight to what motivates clinicians to teach and train. Once these factors are identified we can address some of the issues that form a barrier towards effective teaching. Creating quality clinical teachers is vital in the training of our future doctors. If, for example, this study identifies that one of the reasons that hinder teaching is a lack of time to teach, there should be policy changes that implement to allow sufficient time for clinicians to teach, among others. This study may also assist in the design of effective programs that meet both clinicians' motivations and stakeholders' expectations involved in teaching and training, which may ultimately enhance the effectiveness of the medical teaching workforce.

Name	**Ben LIMBU**
Country	NEPAL
Project Title	**Ocular Photo Screening of Children Under 5 Years in Province 1 of Nepal (CPS)**
Mentor	Dr Vivek DAVE
Abstract	**Purpose:** To provide mass eye screening for ocular sign or disease that can potentially lead to blindness or visual impairment among children below 5 years in province 1, Nepal using smartphone or computer-based application. **Methods:** This includes cross-sectional study, smartphone, or computer-based eye photo screening of children under the age of 5 years in 14 districts of province 1 in Nepal for 12 months. Photos of children sent by parents will be reviewed by ophthalmologists and classified either as normal or abnormal. The children will then be referred for further physical ophthalmological examination. Data entered in Excel will then be transferred to SPPS 29.0 for analysis. **Results:** There were 192 respondents from 14 districts included in this study. The mean age of children was 26.7 months (0.3-60, SD ± 18.8) and there were 64 females (33.3%) versus 128 males (66.7%). The majority (175, or 91.1%) of children were normal however, 17 (8.9%) were categorized abnormal considering the photo observation. Among the 17 children classified abnormal by evaluating the photos, squint was the leading disorder, followed by ptosis, chalazion, stye, and leukocoria based on the major observation. According to physical examination, we found 2 children with alternate divergent squint, 2 with congenital cataract and 2 with chalazion as leading disorders. Of the 17 abnormal children, 5 (29.4%) were considered to be under vision-threatening condition in this study. **Conclusion:** This study showed that among the 5 referrals (29.4%) of the 17 abnormal children, if they were not detected and referred, they would have become blind or visually impaired, which explained that the ocular photo screening was very effective among children in a rural to urban setting where eye care facility was inaccessible.

Name	**Kiet Phang LING**
Country	Malaysia
Project Title	**Anterior Vitrectomy Workshops: Confidence Level, Knowledge and Practice Toward Anterior Vitrectomy**
Mentor	Dr Sherman Valero VALERO
Abstract	**Purpose:** Interactive workshop to help ophthalmology trainees and ophthalmologists for better understanding of vitreous loss and develop skills to perform a good anterior vitrectomy. **Methods:** The workshops consisted of two parts: teaching and wet lab. The topics covered basic setting of anterior vitrectomy, types of anterior vitrectomy including bimanual and pars planar anterior vitrectomy. Participants worked on Kitaro stimulated eye model for bimanual vitrectomy and pars planar anterior vitrectomy. The questionnaire form was used to gather data from participants about their practice of anterior vitrectomy; confidence levels of anterior vitrectomy; knowledge of anterior vitrectomy before and after the workshops. **Results:** Three workshops were successfully organized involving a total of 74 participants and 7 speakers. Among them, 59 participants completed the survey and were included in the data analysis. Overall, 62.7% (n=37) are ophthalmologists, but 72.9% (n=43) had performed anterior vitrectomy in less than 10 cases. Before the workshops, participants were asked to rate their confidence level of 0-5 with higher scores indicative of more confidence. The average score before the workshops was 1.95 and after the workshops was 3.59, indicating a higher level of confidence after the workshops. The mean knowledge score (total score = 59) before the workshops was 29.75 (SD ± 15.89) and after the workshops was 46.88 (SD ± 6.36), indicating higher improvement of knowledge after the workshops. We also found that the majority of them (62.5%) practiced on bimanual anterior vitrectomy; 65.0% of them used to take average time of less than 30 minutes to perform a complete anterior vitrectomy; 92.5% of them routinely sutured the corneal main wound after vitreous loss; 90.0% of them achieved round pupils after the anterior vitrectomy. There were only 50.0% of them inserted intraocular lens on the same setting after vitreous loss and only 15% of them used triamcinolone to visualize the vitreous. **Conclusion:** Our findings suggest that anterior vitrectomy workshops are very beneficial to the participants by increasing their level of confidence to perform the anterior vitrectomy and

	improving their basic knowledges of anterior vitrectomy.

Name	**Anu MANANDHAR**
Country	Nepal
Project Title	**The Effectiveness of Audiovisual Educational Intervention in Promoting Knowledge and Better Practice Among Patients of Anterior Uveitis Coming to Tilganga Institute of Ophthalmology**
Mentor	Dr Shaheeda MOHAMED
Abstract	**Purpose:** This is to educate patients of anterior uveitis (AU) about their disease and to increase their compliance in terms of follow-up and proper use of medications to get the best outcome of treatment. **Methods:** This is a pre- and post-interventional study. A special educational material and video focused on the short description on clinical features of anterior uveitis, its causes and complications, and the importance of proper medications were prepared. On the first-day visit to the uveitis clinic, 100 consecutive cases of AU were enrolled in the study. The cases were divided into two groups of 50, each by the computer-generated number. Group A cases were given the educational factsheet along with verbal counseling using regular approach about the proper use of medication and the need of timely follow-up. Group B cases were shown and given educational video in addition to the educational factsheet and the verbal counseling. All 100 cases were asked to fill up a questionnaire on the day of enrollment. The first follow-up visit was done within 7- 10 days, and the final follow-up visit came within 4-6 weeks, with all 100 cases required to fill up the same questionnaire again. The questionnaire sets, percentage of follow-up at the end of the 6-week post-treatment, compliance to the prescription and control of inflammation between two groups on first follow-up (within 7-10 days) and the final follow-up (within 4 -6 weeks) were compared. **Results:** Data analysis is ongoing. Details of the result will be available later. **Conclusion:** It will be available later.

Name	**Elenoa MATOTO-RAIKABAKABA**
Country	Fiji
Project Title	**Use of Telemedicine in the Eye Department During COVID-19 Outbreak**
Mentor	Prof Madhuwanthi DISSANAYAKE
Abstract	**Purpose:** During the height of the community transmission of COVID-19 outbreak when clinics were closed, borders were closed and access to ophthalmology services were limited, the idea of telemedicine was explored and utilized to: 1. to assist in the delivery of ophthalmology services; 2. to maintain patients' access to services following COVID-19 safety protocol; and 3. to support the coordination of patients' booking. **Methods:** This is a quality improvement project. The Ministry of Health and Medical Services with Civil Society Organizations helped to sponsor the equipment which required a toll-free line. The equipment was a laptop with 2 sponsored mobile phones connected to the internet and Viber, all based in the main eye clinic. Registrars and trained eye care nurses were rotated to this station from Monday to Friday, 9am-4pm. All calls made and received were entered into google sheets. All clinic staff were able to access this information and patients were sorted accordingly. This information was analyzed monthly according to the number of calls, types of cases and management required. **Results:** Between September 2021 and June 2022, a total of 3,182 calls recorded had been made and received by telemedicine in ophthalmology. Almost half (48%) of these calls were related to cataract, followed by diabetes (20%), glaucoma (4%), and 24% were classified as other eye diseases. Only 4% of these cases were acute and required to present themselves to the clinic immediately. The ratio between females and males was 52:48. However, 70% of these calls were made up of the Fijian of Indian descent ethnicity, 25% from iTaukei (indigenous) and 5% came from others. In 2021, the number of calls increased in October and peaked in November. It then decreased to a plateau between December 2021 and April 2022, and further decreased in May and June of 2022. Decentralizing of eye care services were established into 6 health centers. Patients who had cataract were classified according to the maturity of the cataract and called in for assessments and surgery as the clinic opened. Diabetic patients were also given clinic bookings accordingly. **Conclusion:** Telemedicine services had an impact in assisting service provision during the peak of the COVID-19 outbreak. It opened a channel of communication between the staff and patients,

	allowed patients to access services in a controlled manner and still followed the COVID-19 safety protocol. It also assisted the department in decentralizing, booking and re-opening of its clinics. However, as restrictions were lifted and services were slowly returning to normalcy, the number of calls also reduced significantly, which might have indicated patient preferences.

Name	**Alex Lap Ki NG**
Country	Hong Kong, China
Project Title	**Improving Public, Patient and Physician Education on Addressing Ocular Surface Inflammation in Dry Eye Disease (DED) Management**
Mentor	Dr Vivek DAVE
Abstract	**Purpose:** It is important to address ocular surface inflammation in dry eye disease (DED) management, yet it is often neglected. The purpose of this LDP project was to educate both the general public and ophthalmologists on how to recognize and treat ocular surface inflammation when managing DED. **Methods:** A series of activities with various formats were conducted. The activities were categorized to target the public and the ophthalmologists. The delivery methods, educational contents, and the impact of each activity were analyzed. The degree of collaborations with various institutions, industries and societies was also analyzed. **Results:** This LDP project took place from September 2021 to September 2022. Public-targeted educational activities included 2 articles in two different newspapers, and a TV interview with TVB, reaching an estimation of over 100,000 general public audience. For ophthalmologist-targeted activities, it included 5 invited talks in 4 different symposiums, one of which was a regional summit with Taiwan. The total audience exceeded 300 ophthalmologists. There was also an education article in a local newsletter targeting general ophthalmologists. The above activities also involved 4 different pharmaceutical companies, 5 different ophthalmology organizations, and 1 academic intuition. **Conclusion:** This self-initiated LDP project has successfully made impact through various modes of educational activities that reached a significant number of ophthalmologists and the general public, which advocated the importance of recognizing and treating ocular surface inflammation when managing dry eye disease.

Name	**Eli PRADHAN**
Country	Nepal
Project Title	**Imaging and Counseling in Diabetic Retinopathy in Promoting Awareness and Compliance Among Diabetic Patients Attending Tertiary Eye Hospital**
Mentor	Dr Sherman VALERO
Abstract	**Purpose:** GENERAL OBJECTIVES To increase their compliance in terms of follow-up so as to reduce complications of the disease. SPECIFIC OBJECTIVES To find out whether the educational intervention, such as fundus photo and OCT imaging, will improve diabetic retinopathy (DR) patients' awareness of the disease; to find out whether the audiovisual educational intervention, such as fundus photo and OCT imaging, pamphlets, video, SMS, phone calls before due time, will improve DR patients' knowledge of disease; to find out whether increasing their understanding of the treatment they receive would enhance their compliance in terms of the proper use of medication; to compare the lost to follow-up (LTFU) rates in two groups. **Methods:** It is the pre- and postinterventional study. SAMPLE POPULATION Patients with diabetes mellitus with moderate and severe retinopathy. SAMPLE SIZE: Assuming proportion of no event to event (no knowledge to knowledge i.e., p01) be 15% and event to no event (knowledge to no knowledge i.e., p10) be 2% with 90% power and 95% confidence, the minimum sample size for the study will be 102. With 10% lost to follow up, the total sample size will be 112 per group. So, the minimum sample size for intervention group will be 112 and non-Intervention (control) group will be 112. 8.5. SAMPLING TECHNIQUES A total of 224 (intervention: 112; control: 112) cases are to be enrolled. Educational materials are distributed, and the counselling will be done for all. All of them will have fundus photo and OCT imaging. Among the total of 224 cases, they will be graded and then randomized to intervention and control group. However, only 112 cases (interventional group) will be explained about fundus photo and OCT, while the control group of 112 cases will not be explained about the images. Randomization will also be used to allocate the patients in two groups (intervention and control). Random numbers (1 or 2) will be generated using Microsoft Excel. According to the random numbers, patients will be placed in respective groups. These random numbers will be placed in Open Data Kit (ODK). The enumerator will be unaware about the random numbers. He/she will only know whether the current patient is in the intervention group or the control group while using ODK software during enumeration. INCLUSION AND EXCLUSION CRITERIA Inclusion: All new cases of mild, moderate, and severe diabetic retinopathy patients.

	Exclusion: Treated diabetic cases, those who do not want participation. DATA COLLECTION TECHNIQUES AND TOOLS • The patients are selected from retina and general outpatient department (OPD) according to the criteria defined. • A specially designed questionnaire set will be filled up electronically in a tablet (ODK) by a staff of research department who is masked about the intervention. • The VA is taken in Snellen chart, and history and clinical examinations are done by the clinicians. • History includes ocular and systemic illness. • Clinical examinations include slit lamp examination by Zeiss, indirect ophthalmoscopy with 90 D lens, and if needed by 20 D. • The fundus photo is taken by Zeiss Fundus camera, model, and OCT by Zeiss CIRRUS 6000. DATA MANAGEMENT AND ANALYSIS Questionnaire sets, compliance in the use of medication, percentage of regularity of follow-up, and control of inflammation between the two groups (arm 1-control group and arm 2- intervention group) will be compared. Collected data will be filled up electronically in an ODK using Tablet. Data cleaning, coding decoding, etc., will be done in Excel. 8.9. STATISTICAL ANALYSIS The cleaned data will be transported to the Statistical Package for the Social Sciences (SPSS) V20 for statistical analysis. For continuous variables, the mean and standard deviation will be calculated. Proportions will be calculated for categorical variables. For association of categorical variable, chi square test/ Fisher exact test will be used wherever applicable. For pre-post difference analysis, Mc-Nemar test will be used for categorical variables. For continuous numerical variables, paired t-test will be used if the pre-post difference follows the normally distributed pattern, otherwise Wilcoxon signed rank test will be used. P value <0.05 will be considered as statistically significant. **Results:** The data entry of the patients is still ongoing. There have been a total of 30 patients for cases and 30 for control group. As we have taken mild and moderate diabetic retinopathy, the follow-up as per protocol is 9 months (mild) and 6 months (moderate NPDR), patients are yet to come for follow-up. The final result will be presented in the APAO 2023 Congress in Kuala Lumpur in February 2023. Before presenting, I will be communicating with my mentor. **Conclusion:** The impact would be to improve compliance due to the fact that even after DR screening many patients tend to get lost in follow-up. During follow-up, compliance will be noted as well as a questionnaire will be filled up.

Name	**Irum RAZA**
Country	Pakistan
Project Title	**Counseling of Patients Undergoing Cataract Surgery for the Management of Diabetic Retinopathy**
Mentor	Dr Shaheeda MOHAMED
Abstract	**Purpose:** To counsel the patients undergoing cataract surgery for the management of diabetic retinopathy. **Methods:** The diabetic patients who were having retinopathy in addition to clinically significant cataract were asked to fill up the questionnaire. This questionnaire included their expectation of visual improvement and comprehension about both the diseases. It also inquired their knowledge of diabetic retinopathy including visit timings, alarming symptoms, and treatment facilities available. Then they were counseled and informed that the surgery would be a part of their management and they had to plan regular visits to ophthalmologists even after the uneventful surgery. They might need retinal intervention whenever required. All this information was also mentioned in their discharge cards. Separate leaflets were given to them mentioning the time of visits, alarming symptoms of diabetic retinopathy and possible treatments available. Another similar questionnaire was asked to be filled up on their second follow-up. **Results:** Data of the first hundred patients had been collected. Among them, 57 patients were females, and 43 patients were males. The data showed that 59% patients had moderate non proliferative diabetic retinopathy, of which 20 patients had clinically significant macular edema too. In addition, 13 patients had severe to very severe non proliferative diabetic retinopathy, while 28 patients showed different stages of proliferative diabetic retinopathy. Most of the patients i.e., 73 of them had no knowledge of their retinal diagnosis. Only 27 patients knew about their diabetic retinopathy. Out of these, 19 patients had undergone different retinal treatment modalities already. As a result of counseling in our set up, the figure of 73 ignorant patients dropped to 24. Those 24 patients belonged to poor and uneducated background. They were not willing to do regular follow-ups and expected 100% improvement of vision after the cataract surgery. They were again counseled about the retinopathy. **Conclusion:** Counseling significantly improved the knowledge of patients who were included in our

	project. Due to low literacy rate in our community, this knowledge can be volatile for them and can become ignorant again after a certain period of time. They may not strictly follow the visit timing. Hence, regular social media campaigns will be carried out. Liaising on with the diabetic department may significantly help us to achieve our goal.

Name	**Bhupesh SINGH**
Country	India
Project Title	**To Develop and Implement a Keratoconus Awareness Program for Optometrists and Study the Outcomes**
Mentor	Prof Muhammad MOIN
Abstract	**Purpose:** To educate optometrists on keratoconus detection and appropriate referral to a cornea specialist. **Methods:** Study Design: A prospective interventional study. A team of trained eye care professionals visited optical stores and educated opticians and optometrists about keratoconus detection. Posters depicting symptoms and signs of keratoconus were placed in the optical stores as a reminder. A list of cornea surgeons was given to the optometrist for referring suspected cases of keratoconus for corneal topography. Feedback link was provided to the patients for their experience. Data collection was done monthly. Data were analyzed for trends in keratoconus screening and accuracy and referral over a period of 6 months. **Results:** There were 105 optometrists included in the study. Seventy-five (71.4%) optometrists referred patients to cornea specialist ophthalmologists for keratoconus evaluation. A total of 465 patients were referred in the study period; of which, 390 (83.8 %) visited the cornea specialists, while 137 (29.4 %) patients were diagnosed as keratoconus on the basis of corneal topography. Month-wise analysis indicated more accurate detection by the optometrist over the period of 6 months. Subsequently, 95% of respondents indicated that they were satisfied with their experience of being referred and managed by a cornea specialist. **Conclusion:** Optometrist level referral program proved to be a good initiative for early detection of keratoconus.

Name	**Xinyi SU**
Country	Singapore
Project Title	**Asian-Centric Clinico-Genomic Bio-Bank for Inherited Retinal Diseases**
Mentor	Dr Linda TSAI
Abstract	**Purpose:** Gene therapy holds promise for blindness prevention for patients with inherited retinal diseases (IRDs). However, many patients do not have access to affordable genotyping services. Accurate genotyping is a pre-requisite for gene therapy. The aim of this project is firstly, to (1) build a clinico-genomic bio-bank for IRDs in Singapore; and (2) establish a bio-bank of peripheral blood mono-nuclear cells (PBMC) for in-vitro disease modelling. **Methods:** A tertiary referral pathway for IRD patients was established. Ethics approval was obtained to conduct a prospective, longitudinal, and observational clinical study. All subjects underwent a detailed ophthalmic history and examination. Multi-modal imaging was performed, including wide-field fundus photo, auto-fluorescence, optical coherence tomography and visual electrophysiology. Blood samples were collected for whole exome sequencing (WES) and PBMC collection. Multi-disciplinary team meetings, including those of geneticists, clinicians and bio-informaticians, were convened for variant curation. PBMCs were reprogrammed into induced pluripotent stem cells (iPSC) using non-integrative Sendai virus, and differentiated into retinal progenitor cells and retinal organoids for in-vitro disease modelling. **Results:** Between March 2021 and September 2022, a total of 196 pro-bands were recruited. WES was performed for 153 pro-bands, for which 94 candidate variants were identified. ABCA4, USHS2A and SNRNP200 collectively accounted for one-third of all cases. Three pathogenic variants in the EYS gene were identified. 2D-retinal progenitor cells and 3D-retinal organoids positive for PAX6 and rhodopsin markers were generated. **Conclusion:** We established an Asian-centric clinico bio-bank for IRDs in Singapore. This enables IRD patients access to gene therapy and opens up the possibility for precision medicine.

Name	**Shaoying TAN**
Country	Hong Kong, China
Project Title	**Development and Advancement of Young Neuro-Ophthalmologist Community in China**
Mentor	Dr Linda TSAI
Abstract	**Purpose:** The development of neuro-ophthalmology in China came later than many other developed parts of the world but had been moving forward at a very rapid pace. Therefore, it is necessary to establish and develop a community for young neuro-ophthalmologists, to increase communication, and to improve the professional competence of young neuro-ophthalmologists in China. **Methods:** To establish the Youth Committee, potential young neuro-ophthalmologists were nominated and identified by the committee members of the Neuro-Ophthalmology Society (NOS), and the Chinese Research Hospital Association (CRHA). Different communication channels and activities for the young neuro-ophthalmologists were established through the official organization. **Results:** The Youth Committee under the NOS and the CRHA has been established. One Honorary President and two International Advisory Consultants were invited to the board. One President, four Vice-Presidents, one Secretary-General and 41 committee members were elected to construct the Committee. There are 33 committee members with a PhD background. The annual meeting of the Committee, joint with the NOS Congress, has been held twice, and will continue to be organized annually. Continuing education sessions, training courses and workshops, and the international modules have also been organized by the Youth Committee. The official channel via social media, has also been established for journal club, case discussion, multiple center clinical trial studies. **Conclusion:** The establishment of the Youth Committee under NOS CRHA, could promote the development of a young neuro-ophthalmologist community in China, provide more opportunities for connections and communications among young neuro-ophthalmologists in and out of China, and benefit the patients and society at the national and international levels.

Name	**Raymond WONG**
Country	Hong Kong, China
Project Title	**Public Education and Fund-raising for Myopia Control of Children in Hong Kong**
Mentor	Dr Sherman VALERO
Abstract	**Purpose:** To raise funds to provide free-of-charge myopia control services for children in Hong Kong who cannot afford treatments. To raise public awareness of potential complications of pathological myopia and the importance of myopia control for children. **Methods:** Organized a charity fund-raising pop music concert. Educated the public and promoted the concert through media, including television, radio and magazines. As the convenor, I lined up the following organizations for the above objectives: - Eye Care Charitable Fund (Hong Kong), Lamborghini Owners Club HK (registered charity organization in Hong Kong), and Purple Star Publishing Limited (concert arrangement). **Results:** We have successfully given public education talks on pathological myopia and promoted the importance of myopia control on a TV channel with the highest views in the city; a radio channel subsidized by the Hong Kong government; and a magazine with a broad range of readers. A music concert was held featuring famous local singers. Tickets were sold out. After deduction of the cost, 100% of the fund raised (HK$881,922) were transferred to Eye Care Charitable Fund (Hong Kong). A myopia control group for delivery of service and public education (school visits, media, etc.) was set up. **Conclusion:** The objectives of public education and fund-raising were successfully achieved. A myopia control group involving various parties was set up for the delivery of the free-of-charge services.

Name	**Chen ZHAO**
Country	China
Project Title	**Promotion of China Pediatric Disease Investigator Group**
Mentor	Prof Muhammad MOIN
Abstract	**Purpose:** To launch a large collaborative network for clinical research and promote the multicenter-based clinical trials for solving problems in pediatric eye disorders and strabismus in China. **Methods:** The collaborative network of several large institutes of pediatric eye disorders and strabismus in China is established, named China-Pediatric Disease Investigator Group (C-PEDIG). Based on the organization, several randomized controlled trials (RCT) of innovative techniques for strabismus treatment are launched to explore the optimal treatment for complicated strabismus. **Results:** Effective operating mechanism was established in C-PEDIG, and two innovative techniques in RCT studies including modified vertical rectus belly transposition versus superior rectus transposition for abducens nerve palsy, and inferior oblique muscle belly transposition versus inferior oblique muscle transposition for inferior oblique overaction, were performed. **Conclusion:** The advantages of two innovative techniques were proved based on the Class I evidence. The C-PEDIG is the successful organization for performing clinical trials which are suitable for Chinese population.

Name	**Varanisese Rorogasa NAVIRI**
Country	Fiji
Project Title	**Transitioning Post-Graduate Training at Pacific Eye Institute/ Fiji National University**
Mentor	Dr/ Prof Neil MURRAY
Abstract	**Purpose:** To align the teaching curriculum, mode of training delivery and assessments of post-graduate training at the Pacific Eye Institute to Fiji National University (FNU) requirements and standards. **Methods:** The current curriculum, program document and course outline of the post-graduate training program was examined. In addition, the current teaching modes, and methods along with the current assessment modalities of the program was re-examined. Gaps between the current training and the FNU requirements were identified and transition plans with timelines were outlined. **Results:** Changes were made to the teaching modes and methods as well on the assessment modalities according to the discrepancies that were identified during the review process. **Conclusion:** Maintaining standards is important in training programs and ensuring that course content and assessments are aligned is part of the ultimate goals. While it is understandable that changes are bound to happen over time to the curriculum, every effort must be undertaken to ensure that as the curriculum is reviewed, the course content and assessments are changed accordingly.

Name	**Yasuo Yanagi YANAGI**
Country	Japan
Project Title	**YO Educational Symposium**
Mentor	
Abstract	**Purpose:** To hold a young ophthalmologist (YO) educational symposium at Japan Ophthalmological Society (JOS) annual meeting as a first step to vitalize YO activities and to support carrier aspirations such as research in Japan. **Methods:** Negotiation with stakeholders JOS and advice from international YO leaders. **Results:** We successfully got support from JOS and held hybrid symposium inviting four outstanding clinician scientists worldwide. **Conclusion:** JOS was supportive of the current proposal, but it was very difficult to get their continued support to hold the symposium annually. Additionally, it was very difficult to find out who is responsible for policy decisions of YO activities in Japan. Tenacious and persistent negotiation would be needed to further Japanese YO activities in the future.

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