Artificial Intelligence-Ophthalmology Symposium

SATURDAY, OCTOBER 24, 2020

TIME	FACULTY	INSTITUTION	LECTURE TITLE
7:45 am - 8:00 am	***Introduction and Opening Remarks*** by R.V. Paul Chan, MD, MSc, MBA and Mark Rosenblatt, MD, PhD, MBA, MHA		
SESSION 1: Overview and Global AI, Moderator: Michael Chiang, MD, MA			
8:00 am - 8:15 am	Michael Chiang, MD, MA	OHSU/ NEI	Session Introduction/AI for Eye Care: Introduction to Promises and Challenges
8:15 am - 8:25 am	Daniel Ting, MD, PhD	Singapore National Eye Center	The Essential Steps of Developing and Testing An AI Algorithm in Ophthalmology
8:25 am - 8:35 am	Pearse Keane, MD, MSc	Moorfields, UK	Predicting Conversion to Neovascular AMD Using Deep Learning
8:35 am - 8:45 am	Paisan Ruamviboonsuk, MD	Rajavithi Hospital, Thailand	Real-World Deploying AI for DR Screening in Thailand
8:45 am - 8:55 am	Parag Shah, DNB	Aravind Eye Hospital, India	Role of AI in Primary Prevention of ROP in India
8:55 am - 9:05 am	Hunter Cherwek, MD	Orbis International	Artificial Intelligence in Low to Middle Income Countries- Applications for Human Resource Development
9:05 am - 9:15 am	Rishi Singh, MD	Cleveland Clinic	Challenges and Barriers to Real-World Artificial Intelligence Adoption for the Healthcare System, Provider, and the Patient
9:15 am - 9:30 am	***Discussion: Section Faculty***		
SESSION 2: Applications, Moderator: Pete Setabutr, MD			
9:30 am - 9:45 am	Pete Setabutr, MD	UIC	Session Introduction/ Automated Analysis of Eyelid Droop
9:45 am - 9:55 am	Dimitri Azar, MD, MBA	20/20 Therapeutics, UIC	Milli to Micro to Nano: Convergence of Microelectronics and AI with Clinical Ophthalmology
9:55 am - 10:05 am	Neil Bressler, MD	Johns Hopkins	Evolution of Deep Learning in Retinal Disease: Using Age-related Macular Degeneration as an Example
10:05 am - 10:15 am	Luis De Sisternes, PhD	Zeiss	Prediction of AMD Time Course Based on OCT and OCT-A Biomarkers
10:15 am - 10:25 am	Xincheng Yao, PhD	UIC	Machine Learning in OCTA Classification
10:25 am - 10:35 am	Ranya Habash, MD	BPEI/Microsoft	Brain-Machine Interface as it Relates to AI & Ophthalmology
10:35 am - 10:45 am	Louis Pasquale, MD	Mount Sinai	Insights into the Pathogenesis of Primary Open Angle Glaucoma Gained from Artificial Intelligence
10:45 am - 11:00 am	***Discussion: Section Faculty***		

11:00 am - 11:10 am	***Break***		

SESSION 3: Translations and Challenges Part 1, Moderator: Joelle Hallak, MS, PhD			
11:10 am - 11:25 am	Joelle Hallak, MS, PhD	UIC	Session Introduction/Translating AI Systems
11:25 am - 11:35 am	Naama Hammel, MD	Google Health	AI in Ophthalmology, Myths, Controversies and Evidence
11:35 am - 11:45 am	Jill Hopkins, MD	Genentech, Inc.	Delivering Personalized Medicine in Retinal Care: From Artificial Intelligence to Clinical Applications
11:45 am - 11:55 am	Mathew MacCumber, MD, PhD	Illinois Retina Associates, Rush	Big Data and AI in Private Practice Settings
11:55 am - 12:05 pm	Jennifer Lim, MD	UIC	Comparison of AI and Dilated Ophthalmoscopy to Reading Center Standards
12:05 pm - 12:15 pm	R.V. Paul Chan, MD, MSc, MBA	UIC	AI - Opportunities for Medical Education and Curriculum Development
12:15 pm - 12:30 pm	***Discussion: Section Faculty***		

SESSION 4: Translations and Challenges Part 2, Moderator: Pete Campbell, MD, MPH			
12:30 pm - 12:45 pm	Pete Campbell, MD, MPH	UIC	Session Introduction/Reporting Guidelines for Clinical Research Involving Artificial Intelligence
12:45 pm - 12:55 pm	Theodore Leng, MD, MS	Stanford	AI of Mobile Phone Images
12:55 pm - 1:05 pm	Darvin Yi, PhD	UIC	End-to-End AI Pipelines
1:05 pm - 1:15 pm	Jayashree Kalpathy-Cramer, PhD	MGH, Harvard	Challenges in AI- Brittleness, Explainability and Bias
1:15 pm - 1:25 pm	Daniel Rubin, MD, MS	Stanford	Scaling Multi-Institutional AI Development Through Federated Learning
1:25 pm - 1:40 pm	***Discussion: Section Faculty***		

1:40 pm - 1:45 pm	***Closing Remarks*** by Joelle Hallak, MS, PhD and Darvin Yi, PhD