

SYM31 - AI and ML: Promise and Purpose for Global Ophthalmology

Cosponsored by the Global Education and Outreach Committee

Significant advances have been made in recent years in the areas of artificial intelligence (AI) and, more specifically, in machine learning (ML), and these advances have increasingly been applied to addressing widespread needs within medicine. Large-scale screening efforts, such as diabetic retinopathy detection, previously required great investments of time and labor. However, these efforts, and others, may be more amenable to the work of algorithm-based, continually refining computer programs designed to do the same work, thereby freeing immense amounts of time and dramatically increasing access to services. Global ophthalmology could stand to benefit immensely from these advances by using AI to address current shortages in human resources and to improve access to care. This panel hopes to move beyond proof of concept and into problem solving from multiple standpoints. The session concludes with a focused example of AI addressing a practical need in global eye care.

Chairs

Richard L Abbott, MD

David H Cherwek MD

Luxme Hariharan MD

Jeff H Pettey MD

Benjamin J Thomas, MD

Vivian T Yin MD

Suzanne Gilbert PhD MPH

Date and Time

Monday, Oct 14, 2019 8:30 AM - 11:00 AM

Location

Moscone Center

Room

SOUTH 151

Topic

Global Ophthalmology

Target Audience

Comprehensive

Schedule

8:30 AM	Welcome and Introduction: Ophthalmology and the Advancing Role of Technology	<i>Richard L Abbott, MD</i>
8:50 AM	AI and ML: Defining the Concept	<i>Michael D Abramoff MD PhD</i>
8:59 AM	Defining the Problems: What Gaps Can AI/ML Fill?	<i>Jeff H Pettey MD</i>
9:08 AM	Frontiers Opening Up Through AI Research	<i>Lily Peng, MD, PHD</i>
9:17 AM	Global Ophthalmology: A Framework for Advancing Care	<i>Ivo Kocur MD</i>

9:2 6 AM	Q&A	...
9:4 6 AM	Application of AI at the Real-Time Transaction Level	<i>Kim Ramasamy, MBBS</i>
9:5 5 AM	AI and Deep Learning: Needs and Targets	<i>John P Campbell, MD MPH</i>
10: 04 AM	AI in Eye Care: Experience of the L V Prasad Eye Institute	<i>Anthony Arokia Vipin Das</i>
10: 13 AM	Examples From DeepMind and the Role of Predictive Modeling: Current Successes and Future Goals	<i>Pearse A Keane MBBCh</i>
10: 22 AM	Leveraging the Technology Today to Build Eye Care Capacity for the Future	<i>Levi Kandeke, MD</i>
10: 31 AM	Cybersight and Capacity Building: Are There Lessons in AI and ML for Human Resources for Eye Health Development Globally?	<i>David H Cherwek MD</i>
10: 40 AM	Q&A	...
11:0 0 AM	End of Session	

