

## PROGRAM

# 20TH ISCFS PRE-CONGRESS SYMPOSIUM

ARTIFICIAL INTELLIGENCE (AI) & EXTENDED REALITY (XR):  
THE FUTURE OF CRANIOFACIAL SURGERY



**Hyatt Regency**  
**SEATTLE USA**

**SEPTEMBER**  
**5, 2023**

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### CONGRESS CHAIR:

Richard Hopper (United States)

### SYMPOSIUM CO-CHAIRS:

Sam Browd (United States)  
Raj Vyas (United States)

## 8:00 WELCOME AND INTRODUCTIONS

### Overview of Congress & Pre-Congress Symposium

Richard Hopper (US)

### Surgery After COVID: Moving Beyond Telehealth Into Our Future

Raj Vyas (US)

### Introduction Keynote Presenter

Sam Browd (US)

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## 8:15 - 9:05 SYMPOSIUM KEYNOTE PRESENTATION

Edgar Auslander (United States)

Senior Director, Head of Strategic Partnerships and Intelligence at Meta (aka Facebook)

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## 9:05 - 10:50 PANEL 1: ARTIFICIAL INTELLIGENCE (AI) IN CRANIOFACIAL SURGERY: DATA & DECISION-MAKING

### Automated Syndrome Diagnosis by Three-Dimensional Facial Imaging

Benedict Hallgrímsson (Canada)

### Machine Learning for Cephalogram Mapping and CT Artifact Reduction

Soh Nishimoto (Japan)

### Neural Networks Trained for Synostosis and Microtia: Diagnosis & Outcomes

Alex Kane (United States)

### AI & Data-Sharing to Rank Severity of Metopic Synostosis – Yes or No to Surgery

Jesse Goldstein (United States)

### Identification of Cleft Anthropometry to Facilitate AR/VR Training

Ross Sayadi (United States)

### Face Value: Machine Learning for Improved Surgical Outcomes

Owase Jeelani (United Kingdom)

### Automated Virtual Planning Using AI and Statistical Shape Models

Marc Metzger (Germany)

### AI Powered Cleft Care: From Handcrafted to Automated PSO and from Multi-Step to Single-Step

Andreas Mueller (Switzerland)

### Discussion & Questions

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## 10:50 - 11:10 COFFEE BREAK

## 11:10 - 11:35 ETHICAL CONSIDERATIONS OF ARTIFICIAL INTELLIGENCE IN CRANIOFACIAL SURGERY

Christian Vercler (United States)

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## 11:35 - 13:00 PANEL 2: EXTENDED REALITY IN CRANIOFACIAL SURGERY: SURGICAL PLANNING, KNOWLEDGE/SKILL TRANSFER & INTRAOPERATIVE GUIDANCE

### Simulation in Cleft Training: Moving from Digital to Virtual

Roberto Flores (United States)

### VR for Virtual Surgical Planning in Craniofacial Surgery

Pravin Patel (United States)

### AR/VR Live Continuous Navigation and Data Acquisition

Sam Browd (United States)

### AR Using Wearable Glass Tech & Computer Vision for Planning and Navigation

Christian El Amm (United States)

### Spatial AR with 3D Surface Projection for Remote Intra-Operative Guidance

Raj Vyas (United States)

### Discussion & Questions

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## 13:00 - 14:00 LUNCH

## 14:00 - 16:00 HANDS-ON TECHNOLOGY FAIR

Network and try out the latest technology in AR, VR, robotics and simulation.

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## 16:00 - 17:25 PANEL 3: FROM IDEAS TO CREATION

### AI/XR in Healthcare: Navigating the FDA

Ryan Douglas, Co-Founder and CEO, DeepWell DTX (United States)

### Building Biomedical Devices: Steps and Pitfalls

Scott Phillips, President, StarFish Medical (Canada)

### Funding Computational Health and Healthcare Innovation

Armen Vidian, Venture Capitalist (United States)

### Protecting your IP & Other Legal Considerations

Mark Gardner, MBA JD, Gardner Law (United States)

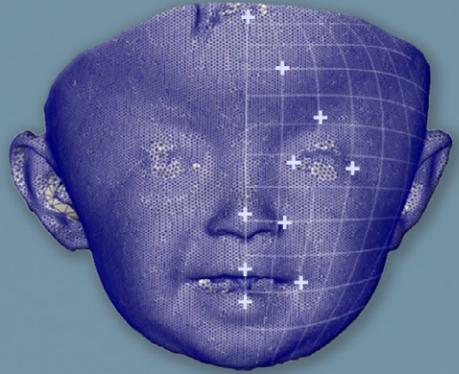
### Discussion

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## 17:25 CLOSING REMARKS



INTERNATIONAL  
SOCIETY OF  
CRANIOFACIAL  
SURGERY



# ISCFS

International Society  
of Craniofacial Surgery

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