XVII Congress of the International Society of Craniofacial Surgery (ISCFS)

October 24th, 2017
Pre-Congress Course

October 25th - 28th, 2017
ISCFS Meeting

Venue & Headquarter
Fiesta Americana Coral Beach Hotel
Cancun, Quintana Roo, Mexico

PROGRAM
CMF Surgery

Individualizing therapeutic concepts.

Surgical innovation is our passion.

Applying advanced technologies.

Understanding surgeon’s requirements.

Developing comprehensive solutions.

Maximizing daily success.

www.klsmartinnorthamerica.com
OFFICIAL PROGRAM

October 24th - 28th, 2017 • Cancun, Quintana Roo, Mexico
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WELCOME TO THE ISCFS 2017 IN MEXICO

As President of the International Society of Craniofacial Surgery (ISCFS), I am delighted to welcome you to 17th Biennal Congress to be held in Cancun, Mexico from October 24th to 28th, 2017. I hope you will enjoy the beauty of the Mexican Caribbean at Cancun, a very unique place, where the history of the Maya culture reaches the modernism of the contemporary Mexico.

Nowadays, more than 50 years after Craniofacial Surgery was born, it is my sincere desire that we all will richly benefit for this experience and take back home new knowledge and richness of spirit to enhance our practice and results.

The ISCFS Officers and a selected group of Founding Members will work in highly specialized scientific program, in which each topic will be analyzed from the very basic to the most sophisticated and modern approach. Naturally we will include the “success”, that fundamentally change the patient’s life, but also the “failures”, they encourage us to explore further for different and better treatments, always trying to find the better smile from our patients. No doubt it will be an exciting and stimulating Scientific Program.

Our social program will also be very attractive and along with the natural beauty of the place, which itself renews the soul, the group will visit the pre-hispanic city of Chichen - Itza, one of the wonders of the world and sacred site of the New Mayan culture. Throughout its nearly 1,200-year history, different people have left their mark on the city and a full vision of the world and the universe is revealed in their stone monuments and artistic works.

Everybody is welcome to shake hands at the welcome cocktail, also to listen to the lectures honoring Paul Tessier and Fernando Ortiz Monasterio during the scientific sessions. As well on Friday night dress up elegant gowns for the gala dinner and share friendship, camaraderie and new perspectives. All these activities will be the ideal framework to enjoy wine and beer, local spicy food and high Mexican cuisine gastronomy, now so trendy around the world.

Please do not forget your swimsuit! You can not miss the chance to feel the pleasure of plunging into the turquoise and gently warm water in Cancun.

Receive my warmest regards!

Dr. Fernando Molina
President, ISCFS
Dear ISCFS friends and members, dear participants,

It is my pleasure as Vice-President of this society to welcome you as at this outstanding meeting organized by our President, Fernando Molina. Twenty four years after the Oaxaca meeting, organized by Fernando Ortiz Monasterio, the ISCFS is back to Mexico, country of numerous craniofacial contributions as well as filled with archeological treasures.

I was lucky to meet the “Fernandos” in 1993 when doing a fellowship in the Mexican team. It was obvious that the breakthrough of osteodistraction initiated by MacCarthy was igniting a revolution in the craniofacial congenital care, and Mexico the place to be. I learnt a lot and we were all excited by imagining the endless applications of distraction. Many of the members of this society spent some time in the Gea Gonzalez Hospital to learn these new techniques. The fever went down, but this society can be proud that it had promoted, considerable advances after Tessier’s initial breakthrough.

I trust our ISCFS will still be able to maintain its scientific leadership in the craniofacial care. I am sure that the XVII ISCFS meeting will contribute by being a very stimulating one; but also a most enjoyable event, not to forget Mexican hospitality, food and history. Thank you, Fernando!

Eric Arnaud, Paris, France
ISCFS Vice-President
ISCFS 2017 Organizing Committee

Fernando Molina, Mexico  
**PRESIDENT**

Eric Arnaud, France  
**VICE PRESIDENT**

Irene Mathijssen, The Netherlands  
**SECRETARY-TREASURER**

Kaneshige Satoh, Japan  
**IMMEDIATE PAST PRESIDENT**

**Council Members**

Charles Davis, New Zealand

Stephen Dover, United Kingdom

Alvaro Figueroa, United States

Richard Hopper, United States

Juan Carlos Rodriguez, Argentina

**ISCFS Founding Members**

Ernest P. Caronni, MD, Italy

David J. David, MD, Australia

Milton T. Edgerton, MD, USA

Ian T. Jackson, MD, USA

Bengt Johanson, MD, Sweden

Henry K. Kawamoto, MD, USA

Daniel Marchac, MD, France

Joseph G. McCarthy, MD, USA

Ian R. Munro, MD, USA

Joseph E. Murray, MD, USA

Fernando Ortiz-Monasterio, MD, Mexico

Jorge Psillakis, MD, Mexico

Kenneth E. Salyer, MD, USA

Michael Striker, MD, France

Paul L. Tessier, MD, France

Jacques van der Meulen, MD, The Netherlands

Linton A. Whitaker, MD, USA

S. Anthony Wolfe, MD, USA

**Past Presidents and Congress Meeting Sites**

1985 Paul Tessier, La Napoule, France

1987 Paul Tessier, New Delhi, India

1989 Ian R. Munro, Florence, Italy

1991 Joseph G. McCarthy, Santiago de Compostela, Spain

1993 Fernando Ortiz-Monasterio, Oaxaca, Mexico

1995 Daniel Marchac, St. Tropez, France

1997 Linton A. Whitaker, Santa Fe, New Mexico, USA

1999 Yu-Ray Chen, Taipei, Taiwan

2001 Claes Lauritzen, Visby Gotland, Sweden

2003 Kenneth E. Salyer, Monterey, California, USA

2005 David J. David, Queensland, Australia

2007 S. Anthony Wolfe, Bahia, Brazil

2009 Steven Wall, Oxford, UK

2011 Anil Madaree, Livingstone, Zambia

2013 Scott Bartlett, Jackson Hole, USA

2015 Kaneshige Satoh, Maihama Tokio Bay, Japan

2017 Fernando Molina, Mexico
**Ortiz Monasterio Memorial Lecture**

2013. JACKSON HOLE, USA  
Joseph McCarthy  

2015 TOKIO, JAPÓN  
David J. David.

**Tessier Memorial Lecture**

2003. MONTEREY, CAL.  
Michael Longaker  

2005. QUEENSLAND, AUS.  
Jeffrey Richardson  

2007. BAHIA, BRAZIL  

2009. OXFORD, UK  

2011. LIVINGSTONE, ZAMB.  

2013. JACKSON HOLE, USA  

2015 TOKIO, JAPÓN  
Joseph McCarthy.

**TESSIER MEDAL RECIPIENTS**

2005 Fernando Ortiz-Monasterio  
Mexico  

2009 Linton Whitaker  
USA  

2013 Daniel Marchac  
France  

2015 Joseph McCarthy  
USA
GENERAL INFORMATION
GENERAL INFORMATION

Registration
The Congress Registration desk hours are:

- Monday 23rd: 17:00 - 20:00 hrs.
- Tuesday 24th: 7:00 – 18:00 hrs.
- Wednesday 25th: 7:00 – 18:00 hrs.
- Thursday 26th: 7:30 – 10:30 hrs.
- Friday 27th: 7:30 – 18:30 hrs.
- Saturday 28th: 7:30 – 12:30 hrs.

Registration Entitlements

- Entry to all scientific sessions and exhibit hall
- Daily Lunch
- Morning and Afternoon Refreshments
- Congress Bag
- Copy of Program / Abstract Book
- Welcome Reception

Exhibit Hall Hours
All registrants are invited to visit the exhibits located in the Hotel.

- Wednesday 25th: 8:00 – 18:00 hrs.
- Thursday 26th: 8:00 – 10:30 hrs.
- Friday 27th: 8:00 – 18:30 hrs.
- Saturday 28th: 8:00 – 12:30 hrs.

Electricity
The standard Cancun electricity supply is 110 volts. Hotels usually offer voltage converters for 220 volt devices. Many sockets do not accept polarized or three-prong plugs so it is recommended that you bring your own adapter but you can usually buy these in the hotel shop.

Travel and Program Disclaimers
In the event of any travel disruptions, Congress Organizers will not be held responsible for any losses incurred by registrants en route to or from the Congress. The program is correct at the time of printing. Congress Organizers reserve the right to alter the program as necessary.

Liability
Congress Organizers are not liable for personal accidents, losses or damage to the private property of registered attendees or any accompanying persons during the Congress. Please make your own arrangements with respect to personal insurance.

Congress Attire

For the meetings and conference rooms: Business Casual (no jeans, shorts or bermudas)

For the Welcome Reception: A light long sleeve shirt with trousers. A local “guayabera” is ideal for this event.

For the Gala Dinner: Cocktail Dress
For men a dark suite and a tie, and for women short dresses (no long dresses are required)

For the Chichen-Itza Tour:
Informal Clothing: Shorts, light trousers or bermudas, shirt and comfortable shoes.

Mobile Phones and Pagers
As a courtesy to speakers and other registrants, we request that all mobile phones and pagers are switched off or muted before entering sessions.

No Smoking Policy
Registrants and guests should be aware that smoking is not permitted in public buildings and many hotels and restaurants including the Congress venue. Smoking is prohibited in the meeting and exhibit rooms at all times.

Program Content Disclaimer
The content of this program is presented solely for educational purposes for use by medical practitioners. This material is intended to express the opinions, techniques or approaches of the presenters. Sponsorship of this program and/or advertising by any company or organization are not to be construed, in any fashion, as an endorsement of the materials or products presented.

Topic and Abstract Disclaimer
All presentation titles and abstracts are printed as submitted by the speakers. ISCFS cannot be responsible for errors in spelling or content.

Recording Policy
Recording (photographic, video and audio) of the sessions, entertainers and exhibit hall during the ISCF's Congress is strictly prohibited.
PROGRAM AT A GLANCE
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<td>Special Lectures Room A</td>
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Registration Area
Coral Sea Room

CORAL SEA ROOM
137 m² / 1,481 sq ft  Room Height: 2.98 m / 9 ft.

To Main Lobby West Tower

Coral Cafe

Stairs to Second Floor

1

(69 m² / 740 sq ft)

AC

CE

AC

2

(67 m² / 221 sq ft)

(0.2 m = 30")

Stairs to Second Floor
PRE-CONGRESS PROGRAM
## Pre-Congress Program

**Tuesday, October 24th, 2017**

**Coral Garden Ballroom**

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<td>08:25 – 08:30</td>
<td><strong>Welcome</strong></td>
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| 08:30 – 08:45 | **SESSION 1**  
**CHAIRMAN:** Anil Madaree, M.D., **CO-CHAIRMAN:** Charles Davis, M.D.  
Juan Carlos Rodríguez, M.D. (Argentina)  
*Spring assisted for posterior expansión and simultaneous fronto-orbital advancement in syndromic craniosynostosis*  
Charles Davis, M.D. (New Zealand)  
*Facial clefts: principles of planning and treatment up-date*  
Eric Arnaud, M.D. (France)  
*Long-term outcomes in sagittal craniosynostosis: what works and what doesn’t. Patients with at least 10 years of follow up. Compare various techniques: open remodeling (whole vault vs regional remodeling), strip + helmet, springs with regards to specific outcome measures: shape, rate of reoperation, incidence of increased intra-cranial pressure, neuropsychological testing results.*  
Steve Buchman, M.D. (USA)  
*The Hypercorrection Technique for metopic, unicoronal and bicoronal craniosynostosis: Why the need to overcorrect the supraorbital bar. Long term results*  
09:30 – 10:00 | Discussion  
10:00 – 10:30 | **Coffee Break** |
| 10:30 – 10:45 | **SESSION 2:**  
**CHAIRMAN:** Steve Buchman, M.D., **CO-CHAIRMAN:** Kaneshige Satoh, M.D.  
Jesse Taylor, M.D. (USA)  
*Treatment of Unicoronal craniosynostosis: timing, type, and long-term outcomes. Panelists who do various types of remodeling (strip + helmet, springs, distraction, conventional unilateral remodeling, conventional bilateral remodeling) can debate their results.*  
Irene Mathijssen, M.D. (The Netherlands)  
*Challenging cases in infant craniosynostosis surgery: (case presentations of kleebachschladel, pan-synostosis, syndromic w airway compromise and globe exposure: what would panelists do, when, and why?)*  
11:00 | Discussion  
11:15 – 12:30 | **My best case ever after, my medical, scientific and human reasons**  
ISCFS Past-Presidents Session:  
Chairman: Fernando Molina, M.D.  
Co-Chairman: Irene Mathijssen, M.D.  
Speakers: Anil Madaree, M.D. (South Africa), Kenneth E. Salyer, M.D. (USA), Scott Bartlett, M.D. (USA), Joseph G. McCarthy, M.D. (USA), S. Anthony Wolfe, M.D. (USA), Kaneshige Satoh, M.D. (Japan), Linton A. Whitaker, M.D. (USA), Steven Wall, M.D. (UK)  
12:30 – 12:45 | Discussion |
Pre-Congress Program
Tuesday, October 24th, 2017
Coral Garden Ballroom

12:45 – 14:00 Lunch

SESSION 3:
CHAIRMAN: Eric Arnaud, M.D., CO-CHAIRMAN: Jesse Taylor, M.D.

14:00 – 14:15 Vera Lucia Cardim, M.D
Observation of long-term craniosynostosis: relapse or biological continuity of a congenital deformity

14:15 – 14:30 Joseph Losee, M.D. (USA)
New techniques in cleft palate surgery: buccal fat, buccal myomucosal flaps, etc.

14:30 – 14:45 Derec M. Steinbacher, M.D. (USA)
Evolving techniques in Orthognathic surgery: surgery first, CAD/CAM planning, custom-milled plates and screws, mandible first vs maxilla first, the role of soft tissue planing in complex CF cases

14:45 – 15:00 Discussion

15:00 – 16:00 Hemifacial Microsomia Panel:
Orthognatic vs Distraction
Moderator: Scott Bartlet, M.D., Joseph Losee, M.D.

16:00 – 16:30 Coffee Break: Visit to the Exhibit and E-Posters Presentations

SESSION 4:
CHAIRMAN: Steven Wall, M.D., CO-CHAIRMAN: Juan Carlos Rodríguez, M.D

16:30 – 16:45 David Dunaway, M.D. (England)

16:45 – 17:00 Juan Martin Chavanne, M.D. (Argentina)
The five keys to success in hiperteleorbitism: current strategies and morphologic out comes with surgical correction

17:15 – 17:30 Gary Rogers, M.D. (USA)
Normal cephalic, asymptomatic craniosynostosis: found by chance vs. late onset causing functional problems. Timing of surgery and the potential functional implications

17:30 – 17:45 Roberto L. Flores
The Surgical Treatment of Pierre Robin Sequence: To distract or not to distract.

17:45 – 18:00 Nivaldo Alonso, M.D. (Brazil)
Syndromic Craniosynostosis: stability or relapse in the long term.

18:00 – 18:15 Discussion
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<td><strong>Special Lectures</strong></td>
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<td>08:00 – 08:05 am</td>
<td>Welcome to Cancun, Mexico</td>
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<td>Opening Remarks</td>
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<td>08:05 - 08:25 am</td>
<td>Diseases in Prehispanic Mexico</td>
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<td>Speaker: Eduardo Matos Moctezuma</td>
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<td>08:25 – 08:45 am</td>
<td>Guest Lecture: ISCFS: A petite histoire</td>
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<td>Speaker: Joseph G. Mc Carthy, M.D.</td>
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<td>08:45 - 08:55 am</td>
<td>Eulogy to Jacques van der Muelen (The Netherlands)</td>
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<td>Speaker: Joseph Gruss, M.D.</td>
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<td>08:55 – 09:05 am</td>
<td>Special Lecture: Safely in Reconstructive Surgery</td>
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<td>Speaker: Eugenio Rodríguez Olivares, M.D.</td>
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<td>09:05 – 09:11 am</td>
<td>Special Lecture: Craniopagus</td>
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<td>Speaker: Jesse Taylor, M.D.</td>
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<td>09:11 - 9:30 am</td>
<td>President Lecture: Curiosity in Craniofacial Surgery</td>
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<td>Speaker: Fernando Molina, M.D.</td>
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<td><strong>General Session 1</strong></td>
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<td>09:30 – 10:30 am</td>
<td>PANEL DISCUSSION 1</td>
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<td>The non-syndromic craniosynostosis: Exploring the best treatment</td>
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<td>Moderator: Kennet Salyer, M.D.</td>
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<td>Panelist: John Persing, M.D., Scott Bartlett, M.D., Irene Mathijssen, M.D., Suresh Magge, M.D.</td>
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<td>10:30 – 11:00 am</td>
<td>Coffee Break: Visit to the Exhibit and E-Posters Presentations</td>
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<td>11:00 – 12:00 pm</td>
<td>PANEL DISCUSSION 2</td>
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<td>Midface Distraction: Long Term Results</td>
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<td>Moderator: Richard Hopper</td>
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<td>Panelist: Jeffrey Fearon, Joseph G. Mc Carthy, Richard Hopper</td>
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<td>12:00 – 01:00 pm</td>
<td>PANEL DISCUSSION 3</td>
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<td>The Apert Syndrome: analyses results after Classic osteotomies vs. distraction</td>
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<td>Moderator: Antony Wolfe</td>
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<td>Panelist: Eric Arnaud, David Dunaway, James Bradley, Richard Hopper</td>
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<td>01:00 – 02:00 pm</td>
<td>Lunch</td>
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2:24 pm  Discussion (10 min)

2:34 pm  
Lectern 1
7  **LATE PRESENTATION OF SYRINX IN CROUZON PATIENTS AND THEIR CLINICAL SYMPTOMS**  
Presenter: Irene Mathijssen M.D. (6 min)  
Authors: Irene Mathijssen, Priya Doerga, Robbin de Goederen, Sarah Versnel, Koen Joosten, Marie-Lise van Veelen  
Institution: Erasmus MC

2:40 pm  
Lectern 2
8  **10-YEAR OUTCOME OF PRE-ADOLESCENT LEFORT III DISTRACTION OSTEONEogenesis IN SYNDROMIC CRANIOsYNOSTOSIS**  
Presenter: Pradip Shetye M.D. (6 min)  
Authors: Pradip Shetye, Travis L. Gibson, Barry H. Grayson, Joseph G. McCarth  
Institution: NYU Langone Medical Center

2:46 pm  
Lectern 1
9  **PEDIATRIC BLOOD MANAGEMENT TEAM IN CRANIOFACIAL SURGERY**  
Presenter: John Girotto M.D. (6 min)  
Authors: John Girotto, Brian Boville, Josh Kelley, John Polley, Robert Mann, Dominic Sanfilippo  
Institution: Helen DeVos Childrens Hospital

2:52 pm  Questions and Discussion  (8 min)

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**ROOM B**

02:00 – 03:00 pm  **CONCURRENT SESSION  1**  
**Syndromic Craniosynostosis**  
Moderators: Cornelius Klein, M.D., Pia Vuola, M.D.

2:00 pm  
Lectern 1
10  **THE TRANSFUSION OUTCOME OF PRE-OPERATIVE ADMINISTRATION OF IRON IN INFANT CRANIOSYNOSTOSIS SURGERY VE**  
Presenter: Chelsea Durocher, M.D. Lisa Luxford, M.D. (3 min)  
Authors: Chelsea Durocher M.D., Lisa Luxford, Benita Lee, Nadia Naraine, Tara Der, John Phillips  
Institution: The Hospital for Sick Children

2:03 pm  
Lectern 2
11  **RECTUS MUSCLE CYCLOROTATION AND STRABISMUS: IMPACT OF ORBITAL ANATOMY IN SYNDROMIC CRANIOSYNOSTOSIS**  
Presenter: Linda Dagi, MD (3 min)  
Authors: Linda Dagi, MD, Sarah Mackinnon, MSc, OC(C), David Zurakowski, PhD, Sanjay Prabhu, MBBS  
Institution: Boston Children's Hospital
2:06 pm 12
Lectern 1

CHANGE IN SLEEP ARCHITECTURE AFTER CRANIAL VAULT SURGERY AND/OR SURGERY FOR OBSTRUCTIVE SLEEP APNEA IN SYNDROMIC CRANIOSYNOSTOSIS
Presenter: Robbin de Goederen M.D. (3 min)
Authors: Robbin de Goederen M.D, Caroline Driessen, Irene Mathijssen
Institution: Erasmus MC Rotterdam

2:09 pm 13
Lectern 2

MORPHOLOGIC SEVERITY OF CRANIOSYNOSTOSIS: IMPLICATIONS FOR SPEECH AND NEURODEVELOPMENT
Presenter: Kamlesh B. Patel M.D. (6 min)
Authors: Damini Tandon, Gary B. Skolnick, Lynn M. Grames, Mary M. Cradock, Matthew D. Smyth, Kamlesh B. Patel
Institution: Division of Plastic and Reconstructive Surgery, Department of Surgery, Washington University School of Medicine

2:15 pm 14
Lectern 1

NEURODEVELOPMENTAL, COGNITIVE, SPEECH, LANGUAGE, AND PSYCHOSOCIAL OUTCOMES FOR CHILDREN WITH A MUTATION IN THE TCF12 GENE AND ASSOCIATED CRANIOSYNOSTOSIS: A RETROSPECTIVE STUDY
Presenter: Dr. Patrick Kennedy-Williams (6min)
Authors: Dr. Patrick Kennedy-Williams, Sarah Kilcoyne, Dr. Helen Care, Prof. Andrew Wilkie, Mr David Johnson
Institution: Oxford University Hospitals NHS Foundation Trust

2:21 pm
Discussion (10 min)

2:31 pm 15
Lectern 2

THE LIVERPOOL-YORK HEAD MODEL - A NOVEL SHAPE-BASED OUTCOMES TOOL FOR CRANIOFACIAL SURGEONS
Presenter: Christian Duncan, M.D. (6 min)
Authors: Christian Duncan, Mr Hang Dai Meng, Mr Will Smith PhD, Mr Nick Pears PhD
Institution: Alder Hey Childrens Hospital NHSFT

2:37 pm 16
Lectern 1

FRONTO-FACIAL FEATURES OF UNILATERAL LAMBDOID CRANIOSYNOSTOSIS: A MULTI-CENTER ASSESSMENT
Presenter: Joseph E Losee, M.D. (6 min)
Authors: Jonathan Y Lee, Sanjay Naran, Jesse A Taylor, Jesse A Goldstein, Scott P Bartlett, Joseph E Losee
Institution: University of Pittsburgh Medical Center

2:43 pm 17
Lectern 2

HYDROCEPHALUS IN FGFR BASED SYNDROMIC CRANIOSYNOSTOSIS - CORRELATING DISTINCT GENETIC MUTATIONS
Presenter: Steven Wall, M.D. (6 min)
Authors: Steven Wall M.D., O Manley, A Wilkie, D Jayamohan, D Johnson, S Magdum
Institution: Oxford Craniofacial Unit
2:49 pm
Lectern 1

18
ANTERIOR CRANIAL VAULT RECONSTRUCTION WITH DISTRACTION FOR PRIMARY AND SECONDARY CRANIOSYNOSTOSIS REPAIR
Presenter: Stephan Barrientos, MD (3 min)
Authors: Jason Miller, M.D., Stephan Barrientos, M.D.
Institution: University of Nebraska Medical Center

2:52 pm
Discussion (8 min)

ROOM A

03:00 – 04:00 pm
CONCURRENT SESSION 2
Sagittal Synostosis
Moderators: Steven Wal, M.D., Jack Van der Meulen, M.D.

3:00 pm
Lectern 2

19
MANAGING THE VARIATION IN DEFORMITY IN SAGITTAL SYNOSTOSIS USING CAL VARIOAL VAULT REMODELING
Presenter: David Johnson M.D. (3 min)
Authors: David Johnson M.D., Greg Thomas, Shailendra Magdum, Jay Jayamohan, Peter Richards, Steven Wall
Institution: Oxford Craniofacial Unit

3:03 pm
Lectern 1

20
CRANIOTOMY WITH INTACT PERIOSTEUM REDUCES BLOOD LOSS IN PI-PLASTY SURGERY FOR SAGITTAL SYNOSTOSIS
Presenter: Tobias Hallén M.D. (3 min)
Authors: Tobias Hallén M.D., Lars Kölby, Robert Olsson, Peter Tarnow, Giovanni Maltese
Institution: Dept of Neurosurgery, Sahlgrenska University Hospital, Gothenburg, Sweden

3:06 pm
Lectern 2

21
NUMERICAL MODELLING TO ASSESS THE EFFECT OF SURGICAL PARAMETERS ON SPRING CRANIOPLASTY OUTCOMES
Presenter: Alessandro Borghi M.D. (3 min)
Authors: Alessandro Borghi M.D., Jan Bruse, Naiara Rodriguez Florez, Silvia Schievano, David Dunaway, Owase Jeelani
Institution: UCL GOS Institute of Child Health and Great Ormond Street Hospital

3:09 pm
Lectern 1

22
LONG-TERM OUTCOMES OF SPRING-ASSISTED CRANIOPLASTY FOR SAGITTAL CRANIOSYNOSTOSIS
Presenter: Daniel Couture M.D. (6 min)
Authors: Christopher Runyan, Daniel Couture, Christopher Michael Runyan, Edreca Allison Thompson, Kyle Gabrick, Jungwon Genevieve Park, Lisa Renee David
Institution: Wake Forest
23
Lectern 2
SAGITTAL SYNOSOTOSIS: ADDRESSING THE TEMPORAL CONSTRAINT IN ENDOSCOPIC CORRECTION
Presenter: Nicole Kurnik M.D. (6min)
Authors: Davinder J. Singh, Davinder J. Singh, Nicole Kurnik, Ruth Bristol, David Shafron
Institution: Phoenix Childrens Hospital/Barrow Cleft and Craniofacial Center/Mayo School of Medicine

3:21 pm
Discussion (10 min)

3:31 pm
Lectern 1
THREE-DIMENSIONAL HEAD SHAPE CHANGES AFTER EXTENDED SAGITTAL STRIP CRANIECTOMY AND HELMET THERAPY
Presenter: Rami R. Hallac (3 min)
Authors: Rami R. Hallac, Pang-yun Chou, Christopher Warne, Neil M. Stewart, Alex A. Kan, Christopher Derderian
Institution: Childrens Health

3:37 pm
Lectern 1
A SINGLE INSTITUTION EXPERIENCE WITH ENDOSCOPIC SUTURECTOMY AND CRANIAL VAULT REMODELLING FOR TREATMENT OF SAGITTAL CRANIOSYNOSTOSIS
Presenter: Mark R. Proctor, M.D. (6min)
Authors: John G. Meara, Mark R. Proctor, Kathryn V. Isaac
Institution: Boston Children’s Hospital

3:43 pm
Lectern 2
DEVELOPMENTAL OUTCOMES IN CHILDREN WITH SAGITTAL CRANIOSYNOSTOSIS AT 3 AND 5 YEARS OF AGE
Presenter: Helen Care M.D. (3 min)
Authors: Helen Care M.D., Jo Horton, Maria Knapp, Natasha Rooney, Louise Dalton, David Johnson
Institution: Oxford Craniofacial Unit, Oxford University Hospitals NHS Foundation Trust, Oxford UK

3:46 pm
Lectern 1
INITIAL EXPERIENCE OF A MODIFIED MELBOURNE TECHNIQUE FOR SCAPHOCEPHALY CORRECTION AT GREAT ORMOND STREET
Presenter: Julia Sharma M.D. (3 min)
Authors: Greg James, Julia Sharma M.D., Alessandro Borghi, Juling Ong, David J Dunaway, N u Owase, Jeelani, Justine L O Hara, Greg James
Institution: Great Ormond Street Hospital

3:49 pm
Discussion (10 min)
###科学项目

**房间B**

03:00 – 04:00 pm  **并行会议2**

**Metopic和Sagittal Synostosis**

**调解人：Stephen Dover, M.D., Lisa David, M.D.**

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<tr>
<td>3:00 pm</td>
<td>29</td>
<td><strong>长期结果-孤立的Metopic Synostosis</strong> - 22年治疗245例患者回顾</td>
<td>Hamidreza Natghian</td>
<td>谢菲尔德大学脑颅面外科</td>
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<td>3:03 pm</td>
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<td><strong>手术结果-Trigonocephaly矫正使用弹簧辅助技术</strong></td>
<td>Juan Martin Chavanne</td>
<td>WCF Bs.As. Craniofacial Center</td>
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<td>3:06 pm</td>
<td>31</td>
<td><strong>3D CT分析-晚发畸形Fronto-orbital remodel for Metopic Synostosis</strong></td>
<td>Silvia Schievano</td>
<td>UCL GOS Institute of Child Health and Great Ormond Street Hospital for Children</td>
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<td>3:09 pm</td>
<td>32</td>
<td><strong>Orbital Hypotelorism矫正</strong></td>
<td>S Anthony Wolfe</td>
<td>Division of Plastic Surgery Miami Children’s Health System</td>
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<td>3:15 pm</td>
<td>33</td>
<td><strong>Metopic Synostosis矫正与Distraction</strong></td>
<td>Damian Palafox</td>
<td>Fernando Ortiz Monasterio Foundation, Hospital Angeles del Pedregal Mexico City</td>
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<td>3:21 pm</td>
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<td><strong>讨论</strong> (10 min)</td>
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<td>3:31 pm</td>
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<td><strong>定量结果-Endoscopic Strip Craniectomy for Metopic Craniosynostosis with Severe Trigonocephaly</strong></td>
<td>Orgest Lajthia</td>
<td>Childrens National Health System</td>
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3:34 pm  
Lectern 2  
35  
EARLY SURGICAL CORRECTION OF TRIGONOCEPHALY WITH MINIMALLY INVASIVE METOPIC AND LATERAL FRONTO-ORBITAL OSTECTOMIES: THE ADDITION OF BILATERAL BLEPHAROPLASTY INCISIONS ALLOWS A COMPLETE RELEASE AND ADVANCEMENT OF THE FRONTO-ORBITAL BAR  
Presenter: Silvio Podda M.D. (3 min)  
Authors: Silvio Podda M.D., Francesco Gargano  
Institution: St. Josephs Childrens Hospital

3:37 pm  
Lectern 1  
36  
SAGITTAL CRANIECTOMY WITH BIPARIETAL MORCELLATION: OUTCOME ANALYSIS OF AGE AT SURGERY AND EXTENDED TECHNIQUES  
Presenter: Brooke French, M.D. (6 min)  
Authors: Brooke French, M.D., C. Corbett Wilkinson, M.D., Brent O’Neill, M.D., David Khechoyan, M.D., Ken Winston, M.D., Aaron Kian, M.D.  
Institution: University of Colorado School of Medicine Division of Plastic and Reconstructive Surgery

3:43 pm  
Lectern 2  
37  
THE MICHIGAN ÆGULLWING APPROACH TO TOTAL CRANIAL VAULT REMODELING FOR SAGITTAL SYNOSTOSIS: LONG TERM OUTCOMES  
Presenter: Steven Buchman M.D. (6 min)  
Authors: Steven Buchman M.D. Fan Liang, Molly McNeely, Riaz Nabi, Ali Trachtenberg, Christian Vercler  
Institution: University of Michigan

3:49 pm  
Lectern 1  
38  
OUTCOMES OF EARLY EXTENDED MIDLINE STRIP CRANIECTOMY FOR SAGITTAL SYNOSTOSIS  
Presenter: Parks CJ, M.D. (3 min)  
Authors: Ellenbogen JR, England JL, Turnock C, Parks CJ, M.D.  
Institution: Alder Hey Childrens NHS Foundation Trust

3:52 pm  
Discussion (8 min)

04:00 – 04:30 pm  
Coffee Break: Visit to the Exhibit and E-Posters Presentations
04:30 – 06:00 pm  **CONCURRENT SESSION 3**  Syndromic, Rare Craniosynostosis and Hypertelorism  Moderators. Xiongzheng Mu, M.D., Dov Charles Goldenberg, M.D.

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**4:30 pm**  
**Lectern 1**  
**39**  
MULTIPLE SUTURE SYNOSTOSIS ASSOCIATED WITH CONGENITAL MYOTONIC DYSTROPHY: A CASE REPORT  
Presenter: Ikkei Tamada M.D. (3 min)  
Authors: Ikkei Tamada M.D., Hiroshi Yoshihashi, Satoshi Ihara  
Institution: Department of Plastic and Reconstructive Surgery, Tokyo Metropolitan Childrens Medical Center

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**4:33 pm**  
**Lectern 2**  
**40**  
DIPYRIDAMOLE-LOADED 3D-PRINTED BIOACTIVE CERAMIC SCAFFOLDS PROMOTE BONE REGENERATION AND PRESERVE CRANIAL SUTURE PATENCY IN A SKELETALLY-IMMATURE RABBIT CALVARIAL DEFECT MODEL  
Presenter: Lukasz Witek, MD  
Authors: Jonathan M. Bekisz, BA, Roberto L. Flores, MD, Lukasz Witek, MSci, PhD, Christopher D. Lopez, BA, Andrea Torroni, MD, Paulo G. Coelho, DDS, PhD  
Institution: New York University School of Medicine

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**4:36 pm**  
**Lectern 1**  
**41**  
SURGERY OF AURICULOTEMPORAL NEUROFIBROMATOSIS IN YOUNG PATIENTS  
Presenter: Mckay Mckinnon M.D. (3 min)  
Authors: Mckay Mckinnon M.D., Nguyen Hong Ha, M.D., Nguyen Tuan, M.D.  
Institution: LurieChildrens Hospital, Presence St. Joseph Hospital

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**4:39 pm**  
**Lectern 2**  
**42**  
NON-SYNDROMIC COMPLEX CRANIOSYNOSTOSIS IN FINLAND 1987-2010  
Presenter: Pia Vuola M.D. (3 min)  
Authors: Pia Vuola M.D., Arja Heliovaara, Annukka Ritvanen, Virve Koljonen, Junnu Leikola  
Institution: Helsinki University Hospital, Craniofacial Centre, Finland

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**4:42 pm**  
**Lectern 1**  
**43**  
LARGE SERIES OF CRANIAL VAULT REMODELING IN PATIENTS WITH SHUNT-INDUCED CRANIOSYNOSTOSIS: OUTCOMES & TREATMENT ALGORITHM  
Presenter: Michael Golinko M.D. (3 min)  
Authors: Michael Golinko M.D., Danielle Atwood, PhD, Eylem Ocal M.D.  
Institution: Arkansas Children’s Hospital

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**4:45 pm**  
**Lectern 2**  
**44**  
A TWENTY-YEAR RETROSPECTIVE ON LONG-TERM CRANIOSYNOSTOSIS OUTCOMES AT THE UNIVERSITY OF MICHIGAN  
Presenter: Fan Liang, M.D. (3 min)  
Authors: Fan Liang, M.D, Fan Liang, Peter Beck, Meike Stoldtts, Eboni Saywer, Christian Vercler, Steven Buchman  
Institution: University of Michigan
4:48 pm
Lectern 1

45
SYSTEMATIC CLASSIFICATION OF THE COMPLICATION PANORAMA IN 1023 CONSECUTIVE CRANIOFACIAL OPERATIONS
Presenter: Bhatti-Softeland Madiha, M.D. (6 min)
Authors: Madiha Softeland, Bhatti-Softeland Madiha, M.D., Paganini Anna, MSc, Maltese Giovanni, M.D, PhD, Tarnow Peter, M.D., PhD, Kolby Lars, M.D., PhD
Institution: Madiha Softeland

4:52 pm
Discussion (10 min)

5:02 pm
Lectern 2

46
ARRHINIA, CONCEPTS AND TREATMENT
Presenter: Rolando Prada, M.D. (6 min)
Authors: Rolando Prada
Institution: Hospital Infantil Universitario de San José

5:08 pm
Lectern 1

47
VARIANT OF FRONTOORBITAL ADVANCEMENT BEFORE HYPERTELORISM CORRECTION
Presenter: J. Britto M.D. (3 min)
Authors: Eric Arnaud, D. Benderbous, J. Britto, G. Paternoster, S. James, E. Vergnaud, M. Zerah
Institution: Hospital Necker craniofacial unit

5:11 pm
Lectern 2

48
DIGITAL MEDICINE IN THE CORRECTION OF HYPERTELORISM
Presenter: Zheyuan Yu M.D. (3 min)
Authors: Zheyuan Yu M.D, Min Wei, Jie Yuan, Liang Xu, Xiongzheng Mu
Institution: Dept. of PRS, Shanghai Ninth People Hospital

5:14 pm
Lectern 1

49
PARTICULATE BONE GRAFT FOR RECONSTRUCTION OF THE NASAL DORSUM AFTER ORBITAL BOX OSTEOTOMIES
Presenter: Anna Carlson, M.D. (3 min)
Authors: Anna Carlson, M.D., Andre Marshall, M.D., Jeffrey Marcus, M.D.
Institution: Duke University Hospital Division of Plastic Surgery

5:17 pm
Discussion (10 min)

5:27 pm
Lectern 2

50
A 22-YEAR REVIEW OF THE USE OF STAINLESS WIRES IN CRANIOSYNOSTOSIS SURGERY - A SINGLE CENTRE STUDY
Presenter: Hamidreza Natghian M.D. (6 min)
Authors: Hamidreza Natghian M.D., Marie Song, Steven Wall, David Johnson
Institution: Oxford Craniofacial Unit
5:33 pm
Lectern 1
51
IMPROVED PERIOPERATIVE OUTCOMES ASSOCIATED WITH CRANIOFACIAL TEAM ANESTHESIOLOGIST
Presenter: Albert K. Oh, M.D. (6 min)
Authors: Albert K. Oh, Srijaya K. Reddy, Sophie R. Pestieau, Erin M. Rada, Robert F. Keating, Gary F. Rogers
Institution: Children's National Health System

5:39 pm
Lectern 2
52
MINIMIZING ALLOGENIC BLOOD TRANSFUSIONS IN CHILDREN UNDERGOING PRIMARY CRANIAL VAULT REMODELING FOR CRANIOSYNOSTOSIS: AKRON CHILDREN'S HOSPITAL PROTOCOL
Presenter: Bin Song M.D. (3 min)
Authors: Bin Song M.D., Ananth Murthy, Niyant Patel
Institution: Akron Children's Hospital

5:42 pm
Lectern 1
53
RISK FACTORS FOR DELAYED REFERRAL TO A CRANIOFACIAL SPECIALIST FOR TREATMENT OF CRANIOSYNOSTOSIS
Presenter: Brad Gandolfi, M.D. (3min)
Authors: Anna Carlson, M.D., Brad Gandolfi, M.D., Danielle Sobol, M.D., Alfredo Farjat, PhD, Alexander Allori, M.D., MPH, Jeffrey Marcus, MD, Anna R Carlsoa, MD
Institution: Duke University Hospital Division of Plastic Surgery

5:45 pm
Lectern 2
54
SQUAMOSAL CRANIOSYNOSTOSIS: EXPECTED PHENOTYPE AND MANAGEMENT
Presenter: Alexander Y. Lin, MD, FACS (3min)
Authors: Alexander Y. Lin, MD, FACS, Kashyap Tadisina
Institution: Saint Louis University School of Medicine

5:48 pm
Lectern 1
55
SIN? SALVAGE? OR FINAL SOLUTION? ALLOPLASTIC RECONSTRUCTION IN HEMIFACIAL MICROsomia (HFm)
Presenter: John Polley, M.D. (3 min)
Authors: John Polley, M.D., John Polley, M.D., John Girotto, M.D., Spiros Lazaros, M.D., Neophytos Demetriades, DDS M.D., Joseph Taylor, M.D., Nicholas Adams, M.D.
Institution: Helen DeVos Childrens Hospital, Grand Rapids, Michigan USA

5:51 pm
Discussion (9 min)
04:30 – 06:00 pm  | CONCURRENT SESSION 3

Plagiocephaly
Moderators: Jesse Taylor, M.D., Jacobo Felemovicius, M.D.

4:30 pm
Lectern 1

56
A COMPARATIVE ANALYSIS OF LONG-TERM OUTCOMES FOR TREATMENT OF ISOLATED UNILATERAL CORONAL SYNOSTOSIS WITH ENDOSCOPIC SUTURECTOMY OR FRONTO-ORBITAL ADVANCEMENT
Presenter: Kathryn V. Isaac M.D. (3 min)
Authors: Kathryn V. Isaac M.D., Sarah MacKinnon, John G. Meara, Mark R. Proctor, Linda R. Dagi
Institution: Boston Childrens Hospital

4:33 pm
Lectern 2

57
NON-SYNDROMIC UNICORONAL SYNOSTOSIS: DOES THE FACE UNTWIST?
Presenter: Jonathan A. Burge, M.D. (3 min)
Authors: Mark J. Edmondson, Sebastian M. A. Brooke, Jonathan A. Burge, M.D.
Institution: The Royal Childrens Hospital, Melbourne

4:36 pm
Lectern 1

58
NON-INVASIVE ICP MEASUREMENT IN CRANIOFACIAL DISORDERS
Presenter: T Forcht Dagi (6 min)
Authors: T Forcht Dagi, Linda Dagi, Javier Fandino, Robert Keating, Joe Sam Robinson, Arminas Ragauskas
Institution: Queens University Belfast and Vittamed Neurosciences Corp

4:42 pm
Lectern 2

59
A VOLUMETRIC AND CRANIOMETRIC ANALYSIS OF CRANIAL BASE IN UNICORONAL CRANIOSYNOSTOSIS
Presenter: Hoppe Ian, M.D. (3 min)
Authors: Hoppe Ian, M.D, Daniel Mazzaferro, Ari Wes, Sanjay Naran, Scott Bartlett, Jesse Taylor
Institution: The Childrens Hospital of Philadelphia

4:45 pm
Lectern 1

60
FMRI REVEALS ALTERED BRAIN ACTIVATION IN SPATIAL WORKING MEMORY IN UNICORONAL SYNOSTOSIS
Presenter: Jenny F. Yang, M.D. (3 min)
Authors: Jenny F. Yang, M.D, Eric D.K. Brooks, MD, Cheryl LaCadie, MS, Alex Sun, BS, Derek M. Stein bacher, M.D., DMD, FACS, John A. Persing, M.D.
Institution: Yale Plastic and Reconstructive Surgery

4:48 pm
Discussion (10 min)
61
ALTHOUGH REFERRALS FOR NON-SYNDROMIC FRONTAL PLAGIOCEPHALY HAVE BEEN INCREASED DURING THE PAST SEVERAL YEARS, SUCCESSFUL SURGICAL REPAIR OF UNICORONAL SYNOSTOSIS (UCS) REMAINS A CHALLENGE FOR CRANIOFACIAL SURGEONS
Presenter: Amir Daryani M.D. (3 min)
Authors: Amir Daryani M.D.
Institution: sbmu

62
SPEECH AND LANGUAGE DEVELOPMENT IN CHILDREN WITH SYNDROMIC AND NON-SYNDROMIC UNICORONAL SYNOSTOSIS: A LONGITUDINAL RETROSPECTIVE REVIEW
Presenter: Sarah Kilcoyne M.D. (3 min)
Authors: Sarah Kilcoyne M.D., Carrie Luscombe, Andrew Wilkie, Steven Wall, David Johnson
Institution: Oxford Craniofacial Unit

63
3D PRINTING GUIDED SURGERY IN TREATMENT OF UNICORONAL CRANIOSYNOSTOSIS
Presenter: Tarek Elbanoby M.D (3 min)
Authors: Tarek Elbanoby M.D., Amr Mohammed Elbatawy, Gaber M. Aly, Usama A. Abdelfattah, Mohab A. Sharafuddin
Institution: Al Azhar University, Cairo, Egypt

64
INTERNAL DISTRACTION OSTEOTGENESIS WITH PIEZOSURGERY OBLIQUE OSTOTOMY OF SUPRAORBITAL MARGIN OF FRONTAL BONE FOR THE TREATMENT OF UNILATERAL CORONAL SYNOSTOSIS
Presenter: Shen Weimin, M.D. (6 Min)
Authors: Cui Jie, Shen Weimin M.D., Jianbing Chen, Ji Yi, Liangliang Kong
Institution: Department of Plastic Surgery, Children’s Hospital of Nanjing Medical University

Discussion (10 min)

65
INTRACRANIAL VOLUME MEASUREMENT: A SYSTEMATIC REVIEW OF GLOBALLY USED TECHNIQUES AND A DIRECT COMPARISON OF MANUAL, SEMI-AUTOMATIC AND FULLY AUTOMATIC TECHNIQUES
Presenter: Will Breakey, M.D. (6 Min)
Authors: Will Breakey, P.G.M Knoops, A. Borghi, D.J Dunaway, S. Schievano
Institution: Great Ormond Street and UCL Institute of Child Health

66
CHIARI MALFORMATION MANAGEMENT IN BILAMBDOID AND SAGITTAL SYNOSTOSIS
Presenter: Giovanna Paternoster, M.D. (6 Min)
Authors: Giovanna Paternoster, Syril James, Dominique Renier, Federico di Rocco, Michel Zerah, Eric Arnaud
Institution: Hospital Necker CF Unit
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<tr>
<th>Time</th>
<th>Lectern</th>
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<th>Presenter</th>
<th>Authors</th>
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<td>5:35 pm</td>
<td>2</td>
<td>SYNDROMIC CRANIOSYNOSTOSIS AND LATE APPEARING SYRINGOMYELIA</td>
<td>Syril James, M.D. (3 Min)</td>
<td>Syril James, Giovanna Paternoster, Stéphanie Puget, Michel Zerah, Eric Arnaud</td>
<td>Hospital Necker Craniofacial Unit</td>
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<td>5:38 pm</td>
<td>1</td>
<td>AUTOMATED OBJECTIVE VISUAL OUTCOMES ANALYSIS</td>
<td>Elizabeth Zellner, M.D. (3 Min)</td>
<td>Darren Smith, John Phillips, David Khechoyan, Jessica Ching, Elizabeth Zellner</td>
<td>The Hospital for Sick Children</td>
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<td>5:41 pm</td>
<td>2</td>
<td>SURGERY NAVIGATION IN TREATING CONGENITAL MIDFACIAL DYSPLASIA OF FACIAL CLEFT PATIENT</td>
<td>Jie Yuan, M.D. (3 Min)</td>
<td>Jie Yuan, Min Wei, Dong Li, Liang Xu, Zheyuan Yu</td>
<td>Department of plastic and reconstructive surgery, Shanghai 9th people hospital</td>
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<td>5:44 pm</td>
<td>1</td>
<td>AN OUTCOME REVIEW OF 225 PATIENTS WITH METOPIC SYNOSTOSIS TREATED AT BIRMINGHAM CHILDREN’S HOSPITAL OVER 15 YEARS</td>
<td>Neil Opie, M.D. (3 Min)</td>
<td>Neil Opie, MS Dover, H Nishikawa, M Evans, N White, D Rodrigues, M Sharp</td>
<td>Birmingham Children Hospital</td>
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<td>Discussion (13 min)</td>
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<td>8:00 am</td>
<td>71</td>
<td>CORRECTION OF RESIDUAL FACIAL DEFORMITY IN SYNDROMIC CRANIOSYNOSTOSIS AFTER MIDFACIAL ADVANCEMENT</td>
<td>David Dunaway M.D.</td>
<td>David Dunaway M.D., Daljit Gill, Owase Jeelani, Jonathan Britto, Robert Evans, Timothy Lloyd</td>
<td>Royal Children's Hospital of Melbourne</td>
</tr>
<tr>
<td>8:06 am</td>
<td>72</td>
<td>INTRODUCTION OF THE ALDER HEY SURGICAL SITE INFECTION BUNDLE; REDUCING POST-OPERATIVE CRANIOFACIAL INFECTION RATES</td>
<td>Jane England, M.D.</td>
<td>Jane England M.D., Jonathan R Ellenbogen, Dawn Hennigan, Benedetta Pettorini, Christopher Parks</td>
<td>Alder Hey Childrens NHS Foundation Trust</td>
</tr>
<tr>
<td>8:12 am</td>
<td>73</td>
<td>COMPARATIVE COST ANALYSIS OF TEMPORAL HOLLOWING CORRECTION FOLLOWING NEUROSURGICAL PROCEDURES</td>
<td>Gabriel F. Santiago, M.D.</td>
<td>Gabriel F. Santiago, M.D., Anthony Asemota, M.D., M.P.H., Shuting Zhong, M.D., Chad R. Gordon, D.O.</td>
<td>Johns Hopkins University Department of Plastic and Reconstructive Surgery</td>
</tr>
<tr>
<td>8:15 am</td>
<td>74</td>
<td>INCIDENCE OF SECONDARY MIDFACE ADVANCEMENT AT THE TIME OF SKELETAL MATURITY IN PATIENTS WITH A HISTORY OF EARLY LE FORT III DISTRACTION OSTEOGENESIS</td>
<td>Gerald J. Cho M.D.</td>
<td>Gerald J. Cho M.D., Zachary M. Borab, Travis L. Gibson, Pradip R. Shetye, Barry H. Grayson, Roberto L. Flores, Joseph G. McCarthy</td>
<td>NYU Langone Medical Center</td>
</tr>
<tr>
<td>8:18 am</td>
<td>75</td>
<td>CRANIOSYNOSTOSIS REPAIR: FACTORS EFFECTING COMPLICATIONS, READMISSION, AND REOPERATION</td>
<td>Renata Maricevich, M.D.</td>
<td>Kevin Jubbal, Nikhil Agrawal, Larry Hollier, Jr, Dra. Renata Maricevich, M.D.</td>
<td>Loma Linda University</td>
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<tr>
<td>8:21 am</td>
<td></td>
<td>Discussion (10 min)</td>
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</table>
8:31 am  
**Lectern 2**  
**76**  
**ORTHODONTICS AND ORTHOGNATHIC SURGERY IN PATIENTS WITH SYNDROMIC CRANIOSYNOSTOSIS**  
Presenter: Mariana Sabás M.D. (3 min)  
Authors: Mariana Sabás M.D., Emmanuela Nadal-Lopez, M.D.  
Institution: Sociedad Argentina de Ortodoncia. Buenos Aires. Argentina

8:34 am  
**Lectern 1**  
**77**  
**SKULL GROWTH IN UNOPERATED SYNDROMIC CRANIOSYNOSTOSIS**  
Presenter: P.G.M. Knoops, M.D. (3 min)  
Authors: Will Breakey, P.G.M. Knoops, G. James, S. Schievano, D. Dunaway, N.U.O. Jeelani M.D.  
Institution: Great Ormond Street and UCL Institute of Child Health

8:37 am  
**Lectern 2**  
**78**  
**ANALYSIS OF SURGICAL CORRECTION OF CRANIOSYNOSTOSIS: FOA VS PVD**  
Presenter: Xiongzheng Mu M.D. (3 min)  
Authors: Xiongzheng Mu M.D., Yingzhi Wu, Junyin Yang  
Institution: Huashan Hospital, Fudan University

8:40 am  
**Lectern 1**  
**79**  
**PATTERNS OF INTRACRANIAL PRESSURE IN CHILDREN WITH CRANIOSYNOSTOSIS UTILIZING OPTICAL COHERENCE TOMOGRAPHY**  
Presenter: Jordan Swanson M.D. (3 min)  
Authors: Jordan Swanson M.D., Wen Xu, Grant Liu, Philip Storm, Scott Bartlett, Jesse Taylor  
Institution: University of Pennsylvania

8:43 am  
**Lectern 2**  
**80**  
**THE LONG-TERM MORPHOMETRIC OUTCOMES IN PATIENTS WITH UNTREATED CRANIOSYNOSTOSIS**  
Presenter: John Phillips M.D. (6 min)  
Authors: John Phillips M.D., Christopher Forrest, Elizabeth Zellner, David Khechoyan, Darren Smith  
Institution: The Hospital for Sick Children

8:49 am  
Discussion (11 min)
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<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Presenter</th>
<th>Authors</th>
<th>Institution</th>
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<tr>
<td>8:00 am</td>
<td>81</td>
<td><strong>ALLOPLASTIC CRANIOPLASTY WITH POROUS POLYETHYLENE IN CHILDREN: OUTCOMES AND CRANIAL GROWTH</strong></td>
<td>Joseph E. Losee, MD</td>
<td>Liliana Camison, Lucas A. Dvoracek, Ilona Brueckmann M.D., Jesse A. Goldstein, Mandeep S. Tamber, Joseph E. Losee</td>
<td>University of Pittsburgh Medical Center</td>
</tr>
<tr>
<td>8:06 am</td>
<td>83</td>
<td><strong>RECONSTRUCTION OF SECONDARY SKULL DEFECTS WITH SPLIT CALVARIAL BONE GRAFTS IN A HIGH RISK POPULATION</strong></td>
<td>Russell Frautschi M.D.</td>
<td>Russell Frautschi M.D., Brianna Halasa, Grzegorz Kwiecien, Antonio Rampazzo, James E. Zins, Bahar Bassiri Gharb</td>
<td>Cleveland Clinic</td>
</tr>
<tr>
<td>8:09 am</td>
<td>84</td>
<td><strong>USE OF TITANIUM MESH FOR CRANIOPLASTY -REPORT ON 100 CASES</strong></td>
<td>Anil Madaree, M.D.</td>
<td>Anil Madaree, M.D., T Pillay</td>
<td>Nelson R Mandela Schoolof Medicine, University of Kwazulu Natal, Durban, South Africa</td>
</tr>
<tr>
<td>8:15 am</td>
<td>85</td>
<td><strong>SYNDROME OF THE TREPHINED: FUNCTIONAL IMPROVEMENT AFTER RECONSTRUCTION OF LARGE CRANIAL VAULT DEFECTS</strong></td>
<td>James P Bradley, M.D.</td>
<td>James P Bradley, M.D., Matthew Hagan, M.D., Joe Tarr, PhD, Justine Lee, M.D., PhD</td>
<td>Temple University</td>
</tr>
<tr>
<td>8:21 am</td>
<td>86</td>
<td><strong>LONG-TERM OUTCOMES OF DEMINERALIZED BONE MATRIX AND RESORBABLE MESH BILAMINATE CRANIOPLASTY IN LARGE PEDIATRIC CALVARIAL DEFECTS IN THE SETTING OF SCARRED DURA</strong></td>
<td>Jonathan Y Lee, M.D.</td>
<td>Jonathan Y Lee, Lucas Dvoracek, Joseph E Losee, Jesse A Goldstein</td>
<td>University of Pittsburgh Medical Center</td>
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8:27 am
Discussion (8 min)

8:35 am
Lectern 1

87
CEPHALOMETRIC PREDICTORS OF CLINICAL SEVERITY IN TREACHER COLLINS SYNDROME
Presenter: Roberto L. Flores, MD (6 min)
Authors: Natalie M. Plana, Elcin Esenlik, DDS, PhD, Natalie M. Plana, BA,
Barry H. Grayson, DDS, Joseph G. McCarthy, M.D., Roberto L. Flores, MD
Institution: Hansjorg Wyss Department of Plastic Surgery

8:41 am
Lectern 2

88
CRANIAL VAULT RECONSTRUCTION FOLLOWING DECOMPRESSIVE CRANIECTOMY;
OPTIMIZING FUNCTIONAL AND AESTHETIC OUTCOMES USING A MULTIDISCIPLINARY APPROACH
Presenter: Micaela Uberti M.D. (6 min)
Authors: Micaela Uberti, Glass, GE, Blythe, J, Homes, SB, Barber, J
Institution: Royal London Hospital

8:47 am
Lectern 1

89
PURPOSE: THE PURPOSE OF THIS STUDY WAS TO DETERMINE THE HOSPITAL COSTS ASSOCIATED WITH DIFFERENT TYPES OF CRANIOPLASTY
Presenter: Oleh Antonyshyn M.D. (6 min)
Authors: Oleh Antonyshyn M.D., Adam Binhammer, Paul Binhammer
Institution: Sunnybrook Health Sciences Centre

8:53 am
Discussion (7 min)
09:00 – 09:30 am  |  CONCURRENT SESSION 5  
| Hemifacial Microsomia  
| Moderators: Roberto Flores, M.D., Hector Malagon, M.D.  

9:00 am  
Lectern 1  
90  
A VOLUMETRIC ANALYSIS OF THE COSTOCHONDRAL GRAFT IN HEMIFACIAL MICROsomia  
Presenter: Scott Bartlett, M.D. (6 min)  
Authors: Scott Bartlett M.D., Netanja ter Maaten, Daniel Mazzaferro, Ari Wes, Andrew Bauder, Sanjay Naran, Jesse Taylor  
Institution: Childrens Hospital of Philadelphia  

9:06 am  
Lectern 2  
91  
FEASIBILITY OF MAGNETIC ACTIVATION OF A MAXILLOFACIAL DISTRACTION OSTEOGENESIS, DESIGN OF A NEW DEVICE  
Presenter: Boisson Jean M.D. 6 min)  
Authors: Boisson Jean, Strozyk Herve, Diner Patrick, Debelmas Alexandre, Picard Arnaud, Kadlub Natacha  
Institution: ENSTA-ParisTech  

9:12 am  
Lectern 1  
92  
DISTRACTION OSTEOGENESIS IN MICROVASCULAR FREE FIBULA FLAP FOR HEMIFACIAL MICROsomia PATIENTS  
Presenter: Eric Santamaría, M.D. (6 min)  
Authors: Eric Santamaria, M.D., Adriana Guerrero, Maria Soledad Rubio, Damian Palafox, Maria del Carmen Pamplona  
Institution: Hospital Dr. Manuel Gea Gonzalez  

9:18 am  
Lectern 2  
93  
MODIFIED SIMULTANEOUS BIMAXILLARY DISTRACTION OSTEOGENESIS FOR CORRECTION OF FACIAL ASYMMETRY USING SEMI-BURIED MANDIBULAR DISTRACTORS. IN CHILDREN AND ADULTS, WITH LON-TERM FOLLOW UP  
Presenter: Ahmed Medra M.D. (3 min)  
Authors: Ahmed Medra M.D, Ahmed Mohamed Medra  
Institution: Alexandria University, Faculty of Dentistry  

9:21 am  
Lectern 1  
94  
SPEECH AND LANGUAGE CONCERNS IN CRANIOFACIAL MICROsomia  
Presenter: Nicole Kurnik, M.D. (3 min)  
Authors: Davinder Singh, M.D., Nicole Kurnik, M.D., Kelly Cordero, PHD, CCC-SLP  
Institution: Department of Plastic Surgery, Phoenix Childrens Hospital, Barrow Cleft and Craniofacial Center  

9:24 am  
Lectern 2  
95  
CRANIAL BASE MEASUREMENT IN HEMIFACIAL MICROsomia  
Presenter: Jie Yuan, M.D. (3 min)  
Authors: Xianxian Yang M.D, Xianxian Yang, Xiaojun Chen, Yan Zhang, Gang Chai  
Institution: Department of Plastic and Reconstructive Surgery, Shanghai Ninth Peoples Hospital
9:00 – 09:30 am

**CONCURRENT SESSION 5**

**Orthognathic Surgery**

Moderators: Derec M. Steinbacher, M.D., John Phillips, M.D.

9:00 am

Lectern 2

**96**

**3D EVALUATION OF MAXILLA AND FACE AFTER 2 AND 3 SEGMENTS SURGICALLY ASSISTED MAXILLARY EXPANSION**

Presenter: Max Domingues Pereira M.D. (3 min)

Authors: Max Domingues Pereira M.D., Gabriela Prado, Alexandre Koga, Fabiane Furtado

Institution: Universidade Federal de São Paulo- Escola Paulista de Medicina - UNIFESP- EPM

9:03 am

Lectern 1

**97**

**CONFORMITY OF THE ACTUAL TO PLANNED RESULT IN ORTHOGNATHIC SURGERY**

Presenter: Sarika Madari M.D. (3 min)

Authors: Sarika Madari M.D., Rajendra Sawh-Martinez, Derek Steinbacher

Institution: Yale University

9:06 am

Lectern 2

**98**

**VINTAGE ORTHOGNATIC SURGERY: NO FERWELL FOR MAJOR OSTEOTOMIES**

Presenter: Jacobo Felemovicius M.D. (6 min)

Authors: Jacobo Felemovicius M.D.

Institution: Hospital General Dr. Manuel Gea Gonzalez

9:12 am

Lectern 1

**99**

**AN INTEGRATED SURGICAL PROTOCOL FOR ADULT PATIENTS WITH HEMIFACIAL MICROSOMIA: METHODS AND OUTCOME**

Presenter: Lun-Jou Lo, M.D. (6 min)

Authors: Lun-Jou Lo, M.D., Kazuki Yamaguchi, Daniel Lonic, Ellen WC Ko, Lun-Jou Lo

Institution: Chang Gung Memorial Hospital

9:18 am

Lectern 2

**100**

**TRACHEAL SLEEVE CARTILAGE -- VARIATIONS IN PRESENTATION AND CHALLENGES IN MANAGEMENT**

Presenter: Scott Rickert (3 min)

Authors: Scott Rickert

Institution: New York University Langone Medical Center

9:21 am

Discussion (9 min)

09:30 – 10:00 am

Coffee Break: Visit to the Exhibit and E-Posters Presentations
10:00 – 10:30 am  **General Session 2**  
**Fernando Ortiz Monasterio Lecture**

10:00- 10:10 am  **Introduction:**  
Pablo Ortiz Monasterio Prieto, Photographer

10:10 – 10:35 am  **Appearance in History, Art, Plastic Surgery, and Beyond**  
Linton A. Whitaker, M.D.

10:35 – 10:50 am  **Time to prepare for Chichen Itza Tour**

10:50 – 11:00 am  **Meet at the Lobby of the Hotel Fiesta Americana Coral Beach**

11:00 am  **Buses depart to Chichen Itza**
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Presenter(s)</th>
<th>Authors</th>
<th>Institution</th>
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<tbody>
<tr>
<td>08:30 am</td>
<td>101</td>
<td>A NEW TECHNIQUE FOR POSTERIOR DISTRACTION IN CRANIOSYNOSTOSIS:</td>
<td>Yoshiaki Sakamoto M.D.</td>
<td>Yoshiaki Sakamoto M.D., Tomoru Miwa, Kazunari Yoshida, Kazuo Kishi</td>
<td>Keio University School of Medicine</td>
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<td>THE DOUBLE DOOR TECHNIQUE</td>
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<td>08:33 am</td>
<td>102</td>
<td>ANALYSIS OF 20 CONSECUTIVE CASES OF POSTERIOR CRANIAL VAULT DISTRACTION</td>
<td>Yuzo Komuro M.D.</td>
<td>Yuzo Komuro M.D., Daiki Senda, Kazuaki Shimoji, Masakazu Miyajima, Hajime Arai</td>
<td>Department of Plastic Surgery Teikyo University</td>
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<td>08:36 am</td>
<td>103</td>
<td>EXPERIENCE OF POSTERIOR DISTRACTION IN 117 CASES: ANALYSIS OF THE RESULTS AND PROSPECTS FOR THE FUTURE OF THE METHOD</td>
<td>Leonid Satanin M.D.</td>
<td>Leonid Satanin M.D., Niina Salokorpi, Ivan Teterin, Alexander Ivanov, Vitaly Roginsky, Willy Serlo</td>
<td>Moscow Burdenko Neurosurgery Institute, Russia</td>
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<td>08:39 am</td>
<td>104</td>
<td>THE OXFORD EXPERIENCE OF POSTERIOR CRANIAL VAULT DISTRACTION; EVIDENCE FOR A REDUCED CONSOLIDATION PERIOD</td>
<td>David Johnson M.D.</td>
<td>David Johnson M.D., Greg Thomas, Shailendra Magdum, Jay Jayamohan, Jo Byren, Steven Wall</td>
<td>Oxford Craniofacial Unit</td>
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<td>08:51 am</td>
<td>105</td>
<td>POSTERIOR VAULT DISTRACTION IN MULTI-SUTURE SYNOSTOSIS: MORPHOMETRIC ANALYSIS AND OUTCOMES</td>
<td>Christopher R. Forrest, MD</td>
<td>Christopher R. Forrest, MD, Jessica A. Ching, MD, April Clausen, P. Eng</td>
<td>The Hospital for Sick Children, Toronto</td>
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</table>
9:01 am  106  
Lectern 2  
CHANGES IN INTRACRANIAL VOLUME WITH POSTERIOR VAULT DISTRACTION 
FRONTAL ORBITAL ADVANCEMENT  
Presenter: Daiki Senda M.D. (3 min)  
Authors: Daiki Senda M.D., Azusa Shimizu, Doruk Orgun, Takaoki Kimura, Kazuaki Shimoji,  
Masakazu Miyajima, Hajime Arai, Yuzo Komuro  
Institution: Department of Plastic and Reconstructive surgery, Juntendo University

9:04 am  107  
Lectern 1  
FORCE MEASUREMENTS DURING POSTERIOR CALVARIAL VAULT 
OSTEODISTRACTION: A NOVEL MEASUREMENT METHOD  
Presenter: J. Leikola M.D. (3 min)  
Authors: Mikko Savolainen, Antti Ritvanen, Daniel Nowinski, Daniel Saiepour, Mervi  
Paulasto-Kröckel, J.Hukki, E.Tukiainen, J.Leikola M.D.  
Institution: Department of Plastic Surgery, Helsinki University Hospital

9:07 am  108  
Lectern 2  
A CRANIOMETRIC ANALYSIS OF POSTERIOR VAULT DISTRACTION AND ITS EFFECTS 
ON FRONTAL CRANIAL MORPHOLOGY  
Presenter: Scott Bartlett M.D. (3 min)  
Authors: Netanja ter Maaten, Dan Mazzaferro, Ari Wes, Sanjay Naran, Scott Bartlett,  
Jesse Taylor  
Institution: Childrens Hospital of Philadelphia

9:10 am  109  
Lectern 1  
POSTERIOR VAULT DISTRACTION OSTEOGENESIS AND NEUROLOGICAL OUTCOME 
S IN SYNDROMIC CRANIOSYNOSTOSIS  
Presenter: James Thomas Paliga M.D. (6 min)  
Authors: James Thomas Paliga M.D., James SunChildrens, Ari M. Wes, Sanjay Naran,  
Scott P Bartlett, Jesse A Taylor  
Institution: Children's Hospital of Philadelphia

9:16 am  110  
Lectern 2  
A 2 CENTRE EXPERIENCE OF 100 CONSECUTIVE POSTERIOR VAULT DISTRACTIONS: 
PROCEEDURES, OUTCOMES AND COMPLICATIONS  
Presenter: Michael Stephen Dover M.D. (6 min)  
Authors: Michael Stephen Dover M.D., David Johnson Steven Wall,  
Nicholas White Martin Evans, Greg Thomas, Desiderio Rodrigues,  
Sheilendra Magdum, Guirish Solanki, Jay Jayamohan, Hiroshi Nishikawa  
Institution: Birmingham Children's Hospital, UK

9:22 am  Discussion (8 min)
08:30 – 09:00 am  | CONCURRENT SESSION 6  
| Pierre Robin Syndrome  
| Moderators : Jeffrey Marcus, M.D., Marcus Collares, M.D.  

8:30 am  
Lectern 1  

111  
**NEONATAL AND INFANT MANDIBULAR DISTRACTION OSTEOGENESIS: CAN WE PREDICT THE OUTCOME**  
Presenter: Artur Fahradyan, M.D. (3 min)  
Authors: Artur Fahradyan, M.D., Brady Colin, M.D., Michaela Tsuha, BS, Mark M. Urata, Jeffrey A. Hammoudeh  
Institution: Childrens Hospital Los Angeles  

8:33 am  
Lectern 2  

112  
**AN ALGORITHM FOR AIRWAY MANAGEMENT IN PIERRE ROBIN SEQUENCE**  
Presenter: Chad A Purnell M.D. (3 min)  
Authors: Chad A Purnell M.D., Katherine E Hicks, Kathleen R Billings, John M Carter, Bharat Bhushan, Arun K Gosain, Dana M Thompson, Jeffry C Rastatter  
Institution: Lurie Childrens Hospital of Northwestern Feinberg School of Medicine  

8:36 am  
Lectern 1  

113  
**INCREASED PEDIATRIC WEIGHT GAIN FOLLOWING MANDIBULAR DISTRACTION OSTEOGENESIS**  
Presenter: Cyril S Gary M.D. (3 min)  
Authors: Cyril S Gary M.D., Sharon Marczewski, Patricia M Vitagliano, Derek M Steinbacher  
Institution: Yale School of Medicine  

8:39 am  
Lectern 2  

114  
**EXTREME MICROGNATHIA IN SYNDROMIC PATIENTS: SEQUENTIAL MANDIBULAR DISTRACTION DURING GROWTH TO FINAL SKELETAL CORRECTION**  
Presenter: Andrew Heggie M.D. (6 min)  
Authors: Andrew Heggie M.D., Anthony Holmes  
Institution: Royal Children's Hospital of Melbourne  

8:45 am  
Lectern 1  

115  
**PATHOGENESIS OF CLEFT PALATE IN ROBIN SEQUENCE: OBSERVATIONS FROM PRENATAL MRI**  
Presenter: Cory M. Resnick, DMD, MD, FACS (6 min)  
Authors: Cory M. Resnick, DMD, MD, FACS, Tessa D. Kooiman, BS, Carly E. Calabrese, MPH, Judy A. Estroff, MD, Maarten J. Koudstaal, DMD, MD, Bonnie L. Padwa, DMD, MD, FACS  
Institution: Boston Children’s Hospital  

8:51 am  
Discussion (9 min)
### ROOM A

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<tr>
<th>Time</th>
<th>Lecture</th>
<th>Title</th>
<th>Presenter and Affiliation</th>
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<tr>
<td>09:30 – 10:30 am</td>
<td>Concurrent Session 7</td>
<td>Research and Genetics</td>
<td>Moderators: Joseph Losee, M.D., Carlos Raul Barcelo, M.D.</td>
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<tr>
<td>9:30 am</td>
<td>116</td>
<td>Neural response to language in craniosynostosis: an electrophysiologic study</td>
<td>Alexander Sun M.D. (6 min)</td>
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<tr>
<td></td>
<td></td>
<td>Authors: Alexander Sun M.D., Max Rolison, Carolyn Chuang, Derek Steinbacher, John Persing, James McPartland</td>
<td>Institution: Yale School of Medicine</td>
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<tr>
<td>9:36 am</td>
<td>117</td>
<td>Elucidation of genetic disorders in unclassified rare craniofacial hyperostoses: two cases of somatic mutation mosaicism</td>
<td>Yoshitaka Kubota M.D. (3 min)</td>
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<tr>
<td></td>
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<td>Authors: Yoshitaka Kubota M.D., Yoshihisa Yamaji, Yoshitaro Sasahara, Shinsuke Akita, Nobuyuki Mitsukawa</td>
<td>Institution: Chiba University</td>
</tr>
<tr>
<td>9:39 am</td>
<td>118</td>
<td>Identification of several novel craniosynostosis genes by next generation sequencing</td>
<td>Jacqueline A.C. Goos (3 min)</td>
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<tr>
<td></td>
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<td>Authors: Jacqueline A.C. Goos, Sigrid M.A. Swagemakers, Ans M.W. van den Ouweland, Marieke F. van Dooren, Andrew O.M. Wilkie, Irene M.J. Mathijssen</td>
<td>Institution: Erasmus MC, University Medical Center</td>
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<tr>
<td>9:42 am</td>
<td>119</td>
<td>VEGF does not improve BMP-2-mediated bone regeneration in complicated calvarial defects in rabbits</td>
<td>Liliana Camison M.D. (3 min)</td>
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<td></td>
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<td>Authors: Liliana Camison M.D., Michael R. Bykowski, Jack Brooker, Phil Campbell, Gregory M. Cooper, Joseph E. Losee</td>
<td>Institution: University of Pittsburgh Medical Center</td>
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<tr>
<td>9:45 am</td>
<td>120</td>
<td>Elevated retinoid signaling as the genetic basis for an OAVS-like presentation in mice</td>
<td>Timothy C Cox, M.D. (3 min)</td>
</tr>
<tr>
<td></td>
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<td>Authors: Timothy C Cox, M.D., Esra D Camci</td>
<td>Institution: University of Washington</td>
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</table>
121  DIPYRIDAMOLE ENHANCES BONE REGENERATION IN 3D PRINTED BIOACTIVE CERAMIC SCAFFOLDS  
Presenter: Christopher D Lopez, BA  (3 min)  
Authors: Christopher D Lopez, BA, Lukasz Witek, MSci, PhD, Jonathan M Bekisz, BA, J. Rodrigo Diaz-Siso, MD, Eduardo D. Rodriguez, MD DDS, Paulo G. Coelho, DDS PhD  
Institution: Icahn School of Medicine at Mount Sinai

122  MODELLING BONE FORMATION AT THE CRANIAL SUTURES IN WILD TYPE MOUSE  
Presenter: Mehran Moazen M.D. (6 min)  
Authors: Arsalan, Joseph Libby, Christian Babbs, Erwin Pauws, Michael J. Fagan, Mehran Moazen  
Institution: University College London, UK

123  CRANIOFACIAL AND LONG BONE ANOMALIES IN STAT3 MUTATIONS  
Presenter: David Boutboul (3 min )  
Authors: Roman Hossein Khonsari, David Boutboul, Nabil Kaci, Kimberley Ching, John Manis, Laurence Legeai-Mallet  
Institution: Hôpital Universitaire Necker - Enfants Malades, Paris, France

124  ALTERED BRAIN FUNCTIONAL CONNECTIVITY VARIES BY FORM OF CRANIOSYNOSTOSIS  
Presenter: Alexander Sun M.D. (6 min)  
Authors: Alexander Sun M.D, Jeffrey Eilbott, Carolyn Chuang, Derek Steinbache, Kevin Pelphrey, John Persing  
Institution: Yale School of Medicine

125  CONNECTIVE TISSUE GROWTH FACTOR CTGF/CCN2 IS ESSENTIAL FOR SECONDARY PALATOGENESIS  
Presenter: Joe Tarr, PhD (3 min)  
Authors: James P Bradley, MD, Joe Tarr, PhD, Steve Popoff, MD, PhD, Alex Lambi, MD PhD  
Institution: Temple University

126  PEPTIDE AMPHIPHILE NANOFIBERS AMPLIFY EFFECTS OF BMP-2 ON CRANIOFACIAL BONE REPAIR  
Presenter: Reena Bakshi M.D. (3 min)  
Authors: Reena Bakshi M.D., Akishige Hokugo, Kameron Rezzadeh, Mark McClendon, Samuel Stupp, Reza Jarrahy  
Institution: Regenerative Bioengineering and Repair (REBAR) Laboratory, Division of the Plastic and Reconstructive Surgery, Department of Surgery, David Geffen School of Medicine at UCLA
10:21 am
Lectern 2
**127**
**COMPARISON OF FACIAL PHENOTYPES BETWEEN NON-SYNDROMIC INFILTRATING LIPOMATOSIS AND CLOVES SYNDROME**
Presenter: Reid A Maclellan M.D. (3 min)
Authors: Usha Beijnen, Ahmad I Alomari, Arin K Greene, John B Mulliken, Reid A Maclellan M.D.
Institution: Boston Children’s Hospital/ Harvard Medical School

10:24 am
Discussion (6 min)

**ROOM B**

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<tr>
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<th>Presenter</th>
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<tbody>
<tr>
<td>9:00 am</td>
<td>128</td>
<td><strong>EXOME SEQUENCING REVEALS NOVEL GENETIC SUBTYPES OF NON-SYNDROMIC MIDLINE CRANIOSYNOSTOSIS</strong></td>
<td>Andrew T. Timberlake M.D. (6 min)</td>
<td>Andrew T. Timberlake M.D., Charuta Furey, Derek M. Steinbacher, Michael L. DiLuna, Dawid Larysz, John A. Persing, Richard P. Lifton</td>
<td>Yale University</td>
</tr>
<tr>
<td>9:06 am</td>
<td>129</td>
<td><strong>3D PRINTED BIOACTIVE CERAMIC SCAFFOLDS DEMONSTRATE INTRINSIC OSTEOGENIC PROPERTIES IN AN UNDISTURBED OSSEOUS ENVIRONMENT</strong></td>
<td>Christopher D. Lopez, BA (6 min)</td>
<td>Christopher D. Lopez BA, Jonathan M. Bekisz BA, Lukasz Witek, MSci PhD, Leyla Y. Cavdar, Fady G. Gendy, Paulo G. Coelho, DDS PhD</td>
<td>Icahn School of Medicine at Mount Sinai, New York NY</td>
</tr>
<tr>
<td>9:12 am</td>
<td>130</td>
<td><strong>SOMATIC PIK3CA MUTATIONS ARE PRESENT IN MULTIPLE TISSUES OF FACIAL INFILTRATION LIPOMATOSIS</strong></td>
<td>Arin K. Greene, MD, MMSc (6 min)</td>
<td>Javier A. Couto, Dennis J. Konczyk, BS, Matthew P. Vivero, BA, Harry P.W. Kozakewich, M.D., Joseph Upton, M.D., Xi Fu, M.D., Bonnie L. Padwa, DMD, M.D., John B. Mulliken, M.D., Matthew L., Warman, MD, Arin K. Greene, MD, MMsc</td>
<td>Department of Plastic and Oral Surgery, Boston Children’s Hospital, Harvard Medical School</td>
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</table>
**Scientific Program**

**Friday, October 27th, 2017**

Grand Coral Ballroom

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<tr>
<td>9:18 am</td>
<td>Lectern 2</td>
<td>NON-MINERALIZED AND MINERALIZED COLLAGEN SCAFFOLDS INDUCE DIFFERENTIAL OSTEOGENIC SIGNALING PATHWAYS IN HUMAN MESENCHYMAL STEM CELLS</td>
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<td>Presenter: Justine Lee M.D. (6 min)</td>
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<tr>
<td></td>
<td></td>
<td>Authors: Justine Lee, Qi Zhou, Xiaoyan Ren, Jessica Chang, David Bischoff,</td>
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<td>Daniel W. Weissgerber, Dean T. Yamaguchi, Timothy A. Miller, Brendan A.C. Harley</td>
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<td>Institution: University of California Los Angeles</td>
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<tr>
<td>9:24 am</td>
<td>Lectern 1</td>
<td>WHOLE GENOME SEQUENCING FOR IDENTIFICATION OF MISSENCE MUTATION IN MAML3 INVOLVED IN HYPERTELORISM PATIENTS-A SERIES STUDY IN 5 MONOZYGOTIC TWINS</td>
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<td>Presenter: Jie Yuan M.D. (3 min)</td>
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<tr>
<td></td>
<td></td>
<td>Authors: Jie Yuan, Min Wei, Don Li, Shanshan Bai, Zheyuan Yu, Liang X</td>
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<td></td>
<td></td>
<td>Institution: Craniofacial Center, Department of Plastic and Reconstructive Surgery, Shanghai 9th People Hospital</td>
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<tr>
<td>9:27 am</td>
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<td>Discussion (6 min)</td>
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### TUMORS AND CFN DYSPLASIA

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<tr>
<td>9:33 am</td>
<td>Lectern 2</td>
<td>CRANIOFACIAL FIBROUS DYSPLASIA: A MULTI-CENTRE STUDY OF THE BEHAVIOUR OF LESIONS AND THEIR TREATMENT</td>
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<td>Presenter: Khalid El Ghoul M.D. (3 min)</td>
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<tr>
<td></td>
<td></td>
<td>Authors: Khalid El Ghoul M.D., Asher, C., Jivraj, B., Dunaway, D., Koudstaal, M.J., Ong, J.</td>
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<td>Institution: Erasmus Medical Centre</td>
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<tr>
<td>9:36 am</td>
<td>Lectern 1</td>
<td>ABLATIVE PROCEDURES OF THE HEAD AND NECK OFTEN RESULT IN SUBSTANTIAL DEFECTS THAT REQUIRE LARGE VOLUME TISSUE TRANSFER FOR RESTORATION OF FORM AND FUNCTION</td>
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<td>Presenter: Mark W. Stalder M.D. (3 min)</td>
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<tr>
<td></td>
<td></td>
<td>Authors: Mark W. Stalder M.D, Matthew Bartow, Austin Pharo, Charles Patterson,</td>
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<td>Rizwan Aslam, Gerhard S. Mundinger, Hugo St. Hilaire</td>
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<td>Institution: Division of Plastic and Reconstructive Surgery, Louisiana State University Health Sciences Center</td>
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<tr>
<td>9:39 am</td>
<td>Lectern 2</td>
<td>ENDOSCOPIC ENDONASAL SKULL BASE SURGERY IN PEDIATRIC PATIENTS AND IMPACT ON MIDFACE GROWTH</td>
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<td>Presenter: Lindsay A Schuster M.D. (3 min)</td>
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<tr>
<td></td>
<td></td>
<td>Authors: Lindsay A Schuster M.D, Wendy Chen, Shih-Dun Stanley Liu, Yue Fang Chang,</td>
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<td>Barton Branstetter, Paul Gardner</td>
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<td>Institution: Childrens Hospital of Pittsburgh</td>
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</table>
9:42 am  
Lectern 1  
136  
**SURGICAL MANAGEMENT OF A CONGENITAL CRANIOFACIAL TERATOMA VIA EXIT PROCEDURE AND EN BLOC RESECTION**  
Presenter: Tuan A. Truong, MD (6 min)  
Authors: Tuan A. Truong, MD, Sarah A. Frommer, MD/PhD, Steven L. Henry, MD, Patrick K. Kelley, MD  
Institution: Baylor College of Medicine

9:48 am  
Lectern 2  
137  
**SUBCRANIOTOMY WITH NAVIGATION FOR OPTIC NERVE DECOMPRESSION IN FRONTOORBITAL FIBEROUS DYSPLASIA**  
Presenter: Junyi Yang M.D. (3 min)  
Author: Junyi Yang M.D.  
Institution: Huashan Hospital, Fudan University

9:51 am  
Discussion (9 min)

10:00 - 10:30  
Coffee Break: Visit to the Exhibit and E-posters presentations

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**ROOM A**

10:30 am – 01:00 pm  
**GENERAL SESSION 3**

10:30 a 11:00  
**PAUL TESSIER LECTURE**

10:30- 10:35  
**Introduction:**  
Bryant Toth, M.D.

10:35 – 11:00  
**Band of Brothers**  
Kenneth Salyer, M.D.

11:00 – 12:00 pm  
**PANEL DISCUSSION 4**  
Facial Transplants of Composite Tissues: The True  
Moderator: Joseph G. Mc Carthy, M.D.  
Panelist: Eric Santamaría, M.D., Eduardo Rodríguez, M.D.

12:00 – 01:00 pm  
**PANEL DISCUSSION 5**  
Treacher Collins Syndrome: Update  
Moderator: Scott Bartlett, M.D.  
Panelist: Richard Hopper, M.D., Fernando Molina, M.D., John Phillips, M.D.

01:00 – 02:00 pm  
Lunch
## ROOM A

### 02:00 – 03:00 pm

**CONCURRENT SESSION 8**  
**Generalities and miscellaneous**  
Moderators: James Bradley, M.D., Akira Yamada, M.D.

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<th>Institution</th>
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<tr>
<td>2:00 pm</td>
<td>138</td>
<td>WORK-RELATED PHYSICAL DISCOMFORT IN ASCFS AND ASMS MEMBERS: A SURVEY</td>
<td>Ashley L. Howarth, MD</td>
<td>Davinder J. Singh, MD, Susan Hallbeck, PhD, Valerie Lemaine, MD, Shelley S. Noland, MD</td>
<td>Mayo Clinic Arizona</td>
</tr>
<tr>
<td>2:03 pm</td>
<td>139</td>
<td>QUALITY OF LIFE IN ADULTS WITH NON-SYNDROMIC CRANIOSYNOSTOSIS</td>
<td>Daniel Mazzaferro M.D.</td>
<td>Ari Wes, Sanjay Naran, Scott Bartlett, Jesse Taylor</td>
<td>The Childrens Hospital of Philadelphia</td>
</tr>
<tr>
<td>2:06 pm</td>
<td>140</td>
<td>TOTAL HUMAN EYE ALLOTRANSPLANTATION: PROTOCOL OPTIMIZATION OF IMAGING MODALITIES IN A NON-HUMAN PRIMATE MODEL</td>
<td>Edward H Davidson MA (Cantab) MBBS</td>
<td>Jonathan Carney PhD, Brian Lopresti PhD, Maxine Miller M.D., Kia M Washington MD</td>
<td>Montefiore Medical Center/Albert Einstein College of Medicine</td>
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<tr>
<td>2:09 pm</td>
<td>141</td>
<td>CASE REPORT AND TEN-YEAR FOLLOW-UP: UNSUCCESSFUL ATTEMPT AT STAGED SURGICAL SEPARATION OF CRANIOPAGUS TWINS AFTER VENOUS SINUS COIL EMBOLIZATION</td>
<td>Elbert E Vaca, MD</td>
<td>Donald J. Harvey, MD, Chad A Purnell, MD, Arun K Gosain, MD</td>
<td>Division of Plastic &amp; Reconstructive Surgery, Lurie Children’s Hospital, Chicago, IL</td>
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<tr>
<td>2:12 pm</td>
<td>142</td>
<td>ETHNICITY AND CRANIOSYNOSTOSIS: IS THERE A CONNECTION?</td>
<td>Gina Sacks</td>
<td>Albert Oh, Amir Dorofshar, Christian Vercler, Steven Buchman, Kamlesh Patel</td>
<td>University of Michigan</td>
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<td>2:15 pm</td>
<td>143</td>
<td>INCREASED TOTAL RETINAL THICKNESS: A PRECURSOR FOR INTRACRANIAL HYPERTENSION?</td>
<td>S.D.C. van de Beeten M.D.</td>
<td>S.E. Loudon, I.M.J. Mathijssen, M.L.C. van Veelen</td>
<td>Erasmus MC Rotterdam</td>
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<td>Time</td>
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<td>2:18 pm</td>
<td>Discussion <em>(9 min)</em></td>
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<td>2:27 pm</td>
<td>Lectern 1</td>
<td><strong>144</strong> FIRST-IN-HUMAN INTEGRATION OF NEUROMODULATION DEVICE WITHIN COMPUTER-DESIGNED CUSTOM CRANIAL IMPLANT</td>
<td>Chad R. Gordon, D.O. (3 min)</td>
<td>Chad R. Gordon, D.O., Gabriel F. Santiago, M.D., Judy Huang, M.D., Gregory K Bergey, M.D., Mehran Armand, Ph.D., Henry Brem, M.D., William S. Anderson, M.A., M.D., Ph.D.</td>
<td>Johns Hopkins University Department of Plastic and Reconstructive Surgery</td>
</tr>
<tr>
<td>2:30 pm</td>
<td>Lectern 2</td>
<td><strong>145</strong> ANALYSIS OF FOLLICLE-STIMULATING HORMONE RECEPTOR EXPRESSION IN INFANTILE HEMANGIOMA</td>
<td>Arin K Greene MD, MMSc (3 min)</td>
<td>Reid Maclellan MD, MMSc, Fu Xi MD, Javier A Couto MD, Lan Huang PhD, Joyce Bischoff PhD, Arin K Greene MD, MMSc</td>
<td>Boston Childrens Hospital / Harvard Medical School</td>
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<td>2:33 pm</td>
<td>Lectern 1</td>
<td><strong>146</strong> A NEW CLASSIFICATION OF PARRY-ROMBERG SYNDROME</td>
<td>Reena Bakshi M.D. (3 min)</td>
<td>Reena Bakshi M.D., Brad Gandolfi, Kameron Rezzadeh, Henry K. Kawamoto, Reza Jarrahy</td>
<td>Department of Plastic Surgery, University of California, Los Angeles</td>
</tr>
<tr>
<td>2:36 pm</td>
<td>Lectern 2</td>
<td><strong>147</strong> CLEFT WIDTH RATIO AND PALATAL LENGTH: A SIMPLE, PROGNOSTIC SEVERITY SCALE FOR CLEFT PALATE</td>
<td>Meghan McCullough M.D. (3 min)</td>
<td>William P Magee, Caroline Yao, MS, MD, Meghan McCullough, MD, Jordan Swanson, MD</td>
<td>University of Southern California</td>
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<td>2:39 pm</td>
<td>Lectern 1</td>
<td><strong>148</strong> PROLIFERATIVE CAPACITY OF HUMAN CHONDROCYTES IN 3D BIOPRINTED CARTILAGE IN VIVO</td>
<td>Lars Kölby M.D. (6 min)</td>
<td>Lars Kölby M.D., Peter Apelgren, Matteo Amoroso, Anders Lindahl, Camilla Brantsing, Paul Gatenholm</td>
<td>Institute of Clinical Sciences, Department of Plastic Surgery, University of Gothenburg, Sahlgrenska University Hospital, Gothenburg, Sweden</td>
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<tr>
<td>2:45 pm</td>
<td>Lectern 2</td>
<td><strong>149</strong> SALVAGE EAR RECONSTRUCTION OF THE UNSATISFIED PATIENT: AN AUTOGENOUS APPROACH</td>
<td>Akira Yamada M.D. (6 min)</td>
<td>Akira Yamada M.D.</td>
<td>World Craniofacial Foundation</td>
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<td>Discussion <em>(9 min)</em></td>
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02:00 – 03:00 pm  
CONCURRENT SESSION 8  
Planning and imaging  
Moderators: Davinder J. Singh, M.D., David Dunaway, M.D.

2:00 pm  
Lectern 1  
150  
OBSERVATIONS ON THE DIFFUSION MAGNETIC RESONANCE IMAGING IN CHILDREN WITH CRANIOSYNOSTOSIS  
Presenter: Alexandrou K. M.D. (3 min)  
Authors: Alexandrou K. M.D., Mentzelopoulos A., Karanasiou I., Matsopoulos G., Uzunoglu N., Panagopoulos K.  
Institution: Hellenic Craniofacial Center and National Technical University of Athens

2:03 pm  
Lectern 2  
151  
USE OF ANTE-NATAL ULTRASOUND TO DIAGNOSE SAGITTAL SYNOSTOSIS  
Presenter: Peter Anderson M.D. (3 min)  
Authors: Peter Anderson M.D., David David, Sarah Constantine  
Institution: Australian Craniofacial Unit

2:06 pm  
Lectern 1  
152  
PURSUING A 3D CEPHALOMETRIC NORM IN EUMORPHICS: EVALUATION METHOD AND PRELIMINARY RESULTS  
Presenter: Giovanni Badiali M.D. (3 min)  
Authors: Giovanni Badiali M.D., Federica Ruggiero, Cristiana Saporosi, Claudio Marchetti, Alberto Bianchi  
Institution: Oral and Maxillo-facial Surgery Dept, S.Orsola University Hospital Bologna, DIBINEM, Alma Mater Studiorum University of Bologna

2:09 pm  
Lectern 2  
153  
A VALIDATED COMPUTATIONAL MODEL OF NORMAL CALVARIAL GROWTH IN HUMANS  
Presenter: Mehran Moazen M.D. (3 min)  
Authors: Joseph Libby, Aarsalan Marghoub, David Johnson, Roman Khonsari, Michael Fagan, Mehran Moazen M.D.  
Institution: University of Hull, UK

2:12 pm  
Lectern 1  
154  
DIFFUSION TENSOR IMAGING FIBER TRACTOGRAPHY IN YOUNG NON-OPERATED CRANIOSYNOSTOSIS PATIENTS  
Presenter: B.F.M. Rijken M.D. (3 min)  
Authors: B.F.M. Rijken M.D., J.M. Florisson, M. Bedar, A. Leemans, K. van Montfort, M.H. Lequin, I.M.J. Mathijssen  
Institution: Erasmus MC, Rotterda, the Netherlands
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<td>ULTRASOUND ASSESSMENT OF THE CRANIAL VENOUS DRAINAGE IN SYNDROMIC AND NON-SYNDROMIC CRANIOSYNOSTOSIS: A PROSPECTIVE CASE-CONTROL PILOT STUDY</td>
<td>Martijn Cornelissen M.D.</td>
<td>Martijn Cornelissen M.D., Robbin de Goederen, Priya Doerga, Marie-Lise van Veelen, Jeroen Dudink, Irene Mathijssen</td>
<td>Erasmus University Medical Center, Rotterdam, the Netherlands</td>
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<tr>
<td>2:18 pm</td>
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<td>Discussion (9 min)</td>
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<td>2:27 pm</td>
<td>156</td>
<td>1</td>
<td>CHARACTERIZATION OF BILATERAL PARIETAL THINNING</td>
<td>Paymon Sanati-Mehrizy, M.D.</td>
<td>Paymon Sanati-Mehrizy, M.D., Marisa Cornejo, Hope Weissler, Michael J Ingargiola, Thomas Naidich, Peter J Taub</td>
<td>Icahn School of Medicine at Mount Sinai</td>
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<td>PERFUSION OF THE BRAIN IN CHILDREN WITH SYNDROMIC CRANIOSYNOSTOSIS AND HEALTHY CONTROLS</td>
<td>Priya Doerga M.D.</td>
<td>Priya Doerga M.D (3 min) Coauthors: M. Wagner, A. Poretti, R. Tasker, M.H. Lequin, I.M.J. Mathijssen</td>
<td>ErasmusMC</td>
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<td>2:33 pm</td>
<td>158</td>
<td>1</td>
<td>MODELING CRANIOSYNOSTOSIS SEVERITY AND PROGRESSION IN INFANTS USING HIDDEN MARKOV MODELS</td>
<td>David Khechoyan M.D.</td>
<td>David Khechoyan, Salem Karani, Ron Goldman, John Phillips</td>
<td>Children’s Hospital Colorado</td>
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<td>2:36 pm</td>
<td>159</td>
<td>2</td>
<td>APPLICATION OF GEOMETRIC MORPHOMETRICS AND STATISTICAL MODELING IN CRANIOFACIAL SURGERY</td>
<td>David Dunaway M.D.</td>
<td>David Dunaway M.D. Alan Ponniah, James Booth, Anastasios Roussos, Nai Rodriguez-Florez, Silvia Schievano, Stefanos Zafeiriou</td>
<td>Great Ormond Street Hospital for Children</td>
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<tr>
<td>2:39 pm</td>
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<td>1</td>
<td>3D VIRTUAL PLANNING IN CRANIOMAXILLOFACIAL SURGERY</td>
<td>David Genecov, MD</td>
<td>David Genecov, MD, Carlos Raul Barcelo de la Isla</td>
<td>International Craniofacial institute</td>
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<td>2:42 pm</td>
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<td>2</td>
<td>CT LANDMARKS FOR THE MORPHOLOGICAL ASSESSMENT OF UNICORONAL CRANIOSYNOSTOSIS</td>
<td>H. Shido, M.D.</td>
<td>Hiroshi Nishikawa, H. Shido M.D., D. Rodrigues, M. Evans, N White, S Dover</td>
<td>Birmingham Children’s Hospital</td>
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2:45 pm  
Lectern 1  
**162**
DIAGNOSTIC IMAGING OF SKULL DEFORMITIES WITH BLACK BONE MRI
Presenter: Anne Saarikko M.D. (6min)
Authors: Anne Saarikko M.D. Kuusela Linda, Brandstack Nina, Autti Taina
Institution: Cleft and Craniofacial Unit, Dep Plastic Surgery

2:51 pm  
Lectern 2  
Discussion (9 min)

---

**ROOM A**

03:00 – 04:00 pm  
**CONCURRENT SESSION 9**
Hemifacial Microsomia
Moderators: Scott Bartlett, M.D., Oleh Antonyshyn, M.D.

3:00 pm  
Lectern 1  
**163**
OPEN CALLUS MANIPULATION: A STEP FORWARD IN DISTRACTION OSTEOGENESIS RECONSTRUCTION OF THE MANDIBLE AND MAXILLA
Presenter: Alberto Pereira M.D. (3 min)
Authors: Alberto Pereira M.D., Paulo Neves
Institution: Portuguese Armed Forces Hospital

3:03 pm  
Lectern 2  
**164**
ANATOMIC CONSIDERATIONS FOR THE FIRST TEMPOROMANDIBULAR JOINT VASCULARIZED COMPOSITE ALLOTRANSPLANTATION
Presenter: Nima Khavanin M.D. (3 min)
Authors: Nima Khavanin M.D., Diana Lee, Amir H Dorafshar, Patrick Byrne, Edward H Davidson
Institution: Johns Hopkins Hospital

3:06 pm  
Lectern 1  
**165**
GROWTH POTENTIAL OF FREE FIBULA FLAP FOR MANDIBULAR RECONSTRUCTION IN PEDIATRIC AGE
Presenter: Gerardo Chavez-Perez M.D. (3 min)
Authors: Eric Santamari, Soledad Rubio-Mainardi, Damian Palafox, Gerardo Chavez-Perez, Candelaria Cueto
Institution: Hospital General Dr Manuel Gea Gonzalez

3:09 pm  
Lectern 2  
**166**
A RETROSPECTIVE REVIEW OF FREE FIBULA FLAP FOR PEDIATRIC MANDIBLE RECONSTRUCTION AFTER TUMOR RESECTION
Presenter: Ruth Lumbuun M.D. (3 min)
Authors: Prasetyanugraheni Kreshanti, Ruth Lumbuun M.D., Dewi Mukkaramah, Parintosa Atmodiwirjo
Institution: Plastic Reconstructive and Aesthetic Surgery Division, Department of Surgery, Cipto Mangunkusumo Hospital - Faculty of Medicine, Universitas Indonesia
3:12 pm
Lectern 1
167
DEVELOPMENT OF A FULLY BURIED PERSONALISED 3D INTERNAL MANDIBULAR DISTRACTION DEVICE
Presenter: Will Rodgers M.D. (3 min)
Authors: Will Rodgers M.D., Owase Jeelani, Alessandro Borghi, Silvia Schievano, David Dunaway
Institution: Great Ormond Street Hospital for Children

3:15 pm
Lectern 2
168
LEFORT 2.5 OSTEOTOMY WITH MIDFACE DISTRACTION FOR THE TREATMENT OF NAGER SYNDROME
Presenter: Sagar Mehta M.D. (3 min)
Authors: Sagar Mehta M.D., Barbu Gociman, Faizi Siddiqi, Neal Moores, Duana Yamashiro
Institution: University of Utah

3:18 pm
Discussion (9 min)

3:27 pm
Lectern 1
169
ICHOM CRANIOFACIAL MICROSPOMIA - THE DEVELOPMENT OF A STANDARD SET BY GLOBAL MULTIDISCIPLINARY WORKING GROUP
Presenter: Justine O’Hara M.D. (6min)
Authors: Justine O’Hara M.D., Dunaway, D, Arora, J, Koudstaal, M
Institution: Great Ormond Street Hospital for Sick Children

3:33 pm
Lectern 2
170
COMBINED SOFT AND SKELETAL TISSUE MODELLING OF NORMAL AND DYSMORPHIC MIDFACE POSTNATAL DEVELOPMENT
Presenter: Amel Ibrahim M.D. (6min)
Authors: Amel Ibrahim M.D., Michael Suttie, Roberto L. Flores, David Dunaway, Peter Hammond, Patrizia Ferretti
Institution: UCL Great Ormond Street Institute of Child Health, University College London

3:39 pm
Lectern 1
171
EXPERIENCE OF HEMIFACIAL RECONSTRUCTION WITH PREFABRICATED EXPANDED SUPRACLAVICULAR FLAP
Presenter: Cheng Chun Wu M.D. (6min)
Authors: Cheng Chun Wu M.D., Jui Pin Lai
Institution: Chang Gung Memorial Hospital Kaohsiung

3:45 pm
Lectern 2
172
BALANCING DISTRACTION FORCES IN THE MANDIBLE: NEWTONS THIRD LAW OF DISTRACTION
Presenter: Sameer Shakir, MD (6 min)
Authors: Sameer Shakir, MD, Sanjay Naran, MD, Kristen M. Lowe, DDS, MS, Jesse A. Taylor, MD, Scott P. Bartlett, MD
Institution: Children’s Hospital of Philadelphia

3:51 pm
Discussion (9 min)
### ROOM B

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<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Presenter</th>
<th>Authors</th>
<th>Institution</th>
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</table>
| 3:00 pm  | 03:00 – 04:00 pm | **CONCURRENT SESSION 9**  
Syndromic Craniosynostosis  
Moderators: Juan Martin Chavanne, M.D., Eric Arnaud, M.D. | 173 | SIGNIFICANCE OF MIDFACIAL DISTRACTION FOR INFANTS WITH SYNDROMIC CRANIOSYNOSTOSIS  
Presenter: Nobuyuki Mitsukawa M.D. (3 min)  
Authors: Nobuyuki Mitsukawa M.D., Yoshitaka Kubota, Shinsuke Akita, Kaneshige Satoh  
Institution: Dept. of Plastic and Reconstructive Surgery, Chiba University |  

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<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Presenter</th>
<th>Authors</th>
<th>Institution</th>
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</table>
| 3:03 pm  | 03:00 – 04:00 pm | **CONCURRENT SESSION 9**  
Syndromic Craniosynostosis  
Moderators: Juan Martin Chavanne, M.D., Eric Arnaud, M.D. | 174 | COMPARISON OF COMPLICATION RATE BETWEEN MONOBLOC ADVANCEMENT AND LEFORT III OSTEOTOMY, WITH OR WITHOUT DISTRACTION OSTEOSYNTHESIS, IN THE TREATMENT OF CRANIOSYNOSTOSIS  
Presenter: Rebecca Knackstedt M.D. (3 min)  
Authors: Rebecca Knackstedt M.D., Bahar Bassiri, Antonio Rampazzo  
Institution: Cleveland Clinic Foundation |  

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<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Presenter</th>
<th>Authors</th>
<th>Institution</th>
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</table>
| 3:06 pm  | 03:00 – 04:00 pm | **CONCURRENT SESSION 9**  
Syndromic Craniosynostosis  
Moderators: Juan Martin Chavanne, M.D., Eric Arnaud, M.D. | 175 | FUNCTIONAL OUTCOME COMPARISON OF LENGTHENING TEMPORALIS MYOPLASTY AND FREE GRACILIS MUSCLE TRANSFER IN CHILDREN WITH FACIAL PALSY  
Presenter: Phuong Nguyen, M.D. (3 min)  
Authors: Phuong Nguyen, M.D., Dan Mazzaferro, Kristin Faschan, Sameer Shakir, Oksana Jackson, Scott Bartlett  
Institution: Childrens Hospital of Philadelphia |  

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<th>Time</th>
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<th>Title</th>
<th>Presenter</th>
<th>Authors</th>
<th>Institution</th>
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</table>
| 3:09 pm  | 03:00 – 04:00 pm | **CONCURRENT SESSION 9**  
Syndromic Craniosynostosis  
Moderators: Juan Martin Chavanne, M.D., Eric Arnaud, M.D. | 176 | THE MONOBLOC FRONTOFACIAL ADVANCEMENT; THE FORTY-YEAR EXPERIENCE OF A SINGLE CENTRE  
Presenter: Tomas O’Neill, M.D. (6 min)  
Authors: Tomas O’Neill, M.D., Walter Flapper, Vani Prasad, Alistair Jukes, Lynette Moore, Steve Santorenoius  
Institution: Australian Craniofacial Unit |  

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<th>Title</th>
<th>Presenter</th>
<th>Authors</th>
<th>Institution</th>
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| 3:15 pm  | 03:00 – 04:00 pm | **CONCURRENT SESSION 9**  
Syndromic Craniosynostosis  
Moderators: Juan Martin Chavanne, M.D., Eric Arnaud, M.D. | 177 | COGNITIVE, BEHAVIOURAL, SPEECH, LANGUAGE AND DEVELOPMENTAL OUTCOMES ASSOCIATED WITH MUTATIONS OF THE ERF GENE  
Presenter: Helen Care M.D. (3 min)  
Authors: Helen Care M.D., Carrie Luscombe, Louise Dalton, David Johnson, Steven Wall, Andrew Wilkie  
Institution: Oxford Craniofacial Unit, Oxford University Hospitals NHS Foundation Trust, Oxford UK |  

---

54
3:18 pm  
Lectern 2  
178  
TRANSORBITAL SURVAL NERVE GRAFTING FOR PEDIATRIC NEUROTROPHIC KERATOPATHY  
Presenter: Sameer Shakir M.D. (3min)  
Authors: Sameer Shakir M.D., J. Thomas Paliga, Karen Revere, William Katowitz, Phuong D. Nguyen  
Institution: Children's Hospital of Philadelphia

3:21 pm  Discussion (9 min)

3:30 pm  
Lectern 1  
179  
CORRECTION OF SECONDARY CRANIOSYNOSTOSIS DEFORMITIES WITH AUTOLOGOUS FAT  
Presenter: Bryant A Toth, M.D. (6 min)  
Authors: Bryant A Toth, M.D., Peter Sun  
Institution: UCSF-Benioff Childrens Hospital, Oakland, California

3:36 pm  
Lectern 2  
180  
FAT GRAFTING: THE FINAL TOUCH IN CRANEOFACIAL DEFORMITIES  
Presenter: Pablo Arrieta, M.D. (6 min)  
Authors: Pablo Arrieta, M.D., Damián Palafox, Fernando Molina.  
Institution: Fernando Ortiz Monasterio Foundation, Hospital Angeles del Pedregal Mexico City

3:42 pm  
Lectern 1  
181  
PREDICTORS OF AUTOLOGOUS FREE FAT GRAFT RETENTION IN THE MANAGEMENT OF CRANIOFACIAL CONTOUR DEFORMITIES  
Presenter: Cassio Eduardo Raposo Amaral M.D. (6 min)  
Authors: Cassio Eduardo Raposo Amaral M.D., Rafael Denadai, César Augusto Raposo Amaral  
Institution: SOBRAPAR

3:48 pm  
Lectern 2  
182  
INTRAOPERATIVE THREE-DIMENSIONAL VIRTUAL REALITY AND COMPUTED TOMOGRAPHIC GUIDANCE IN TEMPOROMANDIBULAR JOINT ARTHROPLASTY OF SYNDROMIC CRANIOFACIAL DYSOSTOSES  
Presenter: Thomas Willson M.D. (3min)  
Authors: Thomas Willson M.D., Miles Pfaff, Julia Ayeroff, James P. Bradley, Justine C. Lee  
Institution: University of California Los Angeles

3:51 pm  Discussion (9 min)

04:00 – 04:30 pm  Coffee Break: Visit to the Exhibit and E-Posters Presentations
CONCURRENT SESSION 10
Hemifacial Microsomia and Treacher Collins
Moderators: Joseph G. Mc Carthy, M.D., Mc Kay Mc Kinnon, M.D.

04:30 – 05:30 pm

4:30 pm
Lectern 1
183
Surgery-First Orthognathic Surgery for Facial Asymmetry Using Internal Mandibular 3D-Type Distractor
Presenter: Yorikatsu Watanabe M.D. (6 min)
Authors: Yorikatsu Watanabe M.D., Takahiro Yamamoto, Ryo Sasaki, Tanetaka Akizuki
Institution: Tokyo Metropolitan Police Hospital

4:36 pm
Lectern 2
184
New Technique to Manage Narrowed Mandibular Rami in Pediatric Patients
Presenter: Filipp Vladimirov M.D. (6 min)
Authors: Filipp Vladimirov M.D., Dmitry Komelyagin, Dubin Sergey, Topolnickiy Orest, Dergachenko Anna, Krasheninnikov Leonid
Institution: Moscow State University of Medicine and Dentistry

4:42 pm
Lectern 1
185
Changing the Facial Features of Patients with Treacher Collins Syndrome Protocol for 3-Stage Treatment of Hard and Soft Tissue Hypoplasia in the Upper Half of the Face
Presenter: Nobuyuki Mitsukawa M.D. (6 min)
Authors: Nobuyuki Mitsukawa M.D., Atsuomi Saiga, Yoshitaka Kubota, Kaneshige Satoh
Institution: Dept. of Plastic and Reconstructive surgery, Chiba University

4:48 pm
Lectern 2
186
Treacher Collins Syndrome Ectropion Correction with Micro Mitek Canthoexy: A New Option - Preliminary, Long-Term Follow-up
Presenter: Albaraa Aljerian M.D. (6 min)
Authors: Marie Lucie Lessard, Albaraa Aljerian M.D., Hassan AlNaeem
Institution: McGill University Health Center

4:54 pm
Lectern 1
187
Algorithm for Ear Reconstruction After Radical Resection of Arteriovenous Malformation of the Auricular Region
Presenter: Dov Charles Goldenberg M.D. (3 min)
Authors: Dov Charles Goldenberg M.D., Marina Vilela Chagas Ferreira, Rolf Gemperli
Institution: Division of Plastic Surgery Hospital das Clinicas University of Sao Paulo Medical School

4:57 pm
Discussion (8 min)
PLANNING AND IMAGING

5:05 pm  
Lectern 2  
188  
AUTOMATIC PLANNING OF CRANIAL VAULT RECONSTRUCTION FOR METOPIC CRANIOSYNOSTOSIS TREATMENT  
Presenter: Antonio R. Porras M.D. (3 min)  
Authors: Antonio R. Porras M.D., Beatriz Paniagua, Andinet Enquobahrie, Robert Keating, Gary F. Rogers, Marius George Linguraru  
Institution: Childrens National Health System

5:08 pm  
Lectern 1  
189  
IMPROVING AESTHETIC OUTCOMES UTILIZING IMAGE-GUIDED SURGICAL NAVIGATION IN FRONTAL BONE CONTOURING  
Presenter: Brian T Andrews MD (3 min)  
Authors: James D Vargo MD, James P Bradley MD, Brian T Andrews MD  
Institution: University of Kansas Medical Center

5:11 pm  
Lectern 2  
190  
INNOVATIVE APPLICATION OF ROBOTIC (ROSA) ASSISTANCE IN LE FORT III DISTRACTION OSTEOGENESIS  
Presenter: Pramod Subash M.D. (3 min)  
Authors: Pramod Subash M.D., Suhas Udayakumaran, Ashok Pillai, Arjun Krishnadas  
Institution: Amrita Institute of Medical Sciences, Kochi, India

5:14 pm  
Lectern 1  
191  
ORBITAL MORPHOLOGY IN CROUZON SYNDROME: A 3D ASSESSMENT BEFORE AND AFTER FRONTO-FACIAL MONOBLOC ADVANCEMENT WITH INTERNAL DISTRACTION  
Presenter: Khonsari M.D. (3min)  
Authors: Khonsari M.D., Roman Hossein Khonsari, Johan Nysjö, Ronak Sandy, Ingela Nyström, Giovanna Paternoster, Eric Arnaud  
Institution: Hôpital Universitaire Necker - Enfants Malades, Paris, France

5:17 pm  
Lectern 2  
192  
EVALUATION OF THE ACCURACY OF A 3D IMAGING SYSTEM IN CRANIOFACIAL PATIENTS  
Presenter: Ben Robertson, M.D. (3 min)  
Authors: Christian Duncan, David Richardson, Joern Wittig, Chris Parks, Ben Robertson, M.D., Ajay Sinha  
Institution: Alder Hey Childrens Hospital NHSFT

5:20 pm  
Lectern 1  
193  
HOLOGRAPHIC CRANIOFACIAL SURGICAL PLANNING APPLICATION: EVALUATION OF USABILITY  
Presenter: Kihyun Cho, MD, MSc (6 min)  
Authors: Kihyun Cho, MD, MSc, Jeff Yanof, PhD, Graham S Schwarz, MD, FACS, Karl West, MS, Bahar Bassiri, Gharb, MD, PhD, Francis A. Papay, MD  
Institution: Plastic Surgery, Cleveland Clinic, Cleveland, Ohio, USA

5:26 pm  Discussion (8 min)
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<th>Title</th>
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<th>Authors</th>
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<tr>
<td>4:30 pm</td>
<td>194</td>
<td>ORBITAL PHENOTYPE IN TREACHER COLLINS SYNDROME: A STUDY USING MESH-BASED SEGMENTATION AND 3D SHAPE COMPARISON</td>
<td>Julie Levasseur</td>
<td>Khonsari, M.D., Julie Levasseur, Ronak Sandy, Arnaud Picard, Pierre Corre, Johan Nysjö, Roman Hossein Khonsari</td>
<td>Hôpital Universitaire Necker - Enfants Malades, Paris, France</td>
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<td>4:33 pm</td>
<td>195</td>
<td>MINIMALLY INVASIVE ENDOSCOPIC STRIP CRANIECTOMY FOR CRANIOSYNOSTOSIS: RESULTS OF 100 CONSECUTIVE CASES</td>
<td>Suresh N. Magge M.D.</td>
<td>Suresh N. Magge M.D., Orgest Lajthia, Robert F. Keating, John S. Myseros, Chima O. Oluigbo, Gary F. Rogers</td>
<td>Childrens National Health System</td>
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<tr>
<td>4:36 pm</td>
<td>196</td>
<td>MANAGEMENT OF THE INADEQUATELY MANAGED ENDOSCOPIC ASSISTED CORRECTION OF CRANIOSYNOSTOSIS - ROTTERDAM EXPERIENCE</td>
<td>Vani Prasad M.D.</td>
<td>Vani Prasad M.D., Vani Prasad, Abdullah Khawar, Marie-Lise van Veelan, Sarah Versnel, Irene Mathijsen</td>
<td>Sophia Children's Hospital, Rotterdam</td>
</tr>
<tr>
<td>4:39 pm</td>
<td>197</td>
<td>SECONDARY DISTRACTION LE FORT 3 AFTER FRONTOFACIAL MONOBLOC IMPROVES RESISTANT SLEEP APNEA</td>
<td>Sam Haber, M.D.</td>
<td>Sam Haber, M.D., Junnu Leikola, Daniel Saiepour, Brigitte Fauroux, Hossein Khonsari, Eric Arnaud</td>
<td>Hospital Necker craniofacial unit</td>
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<td>4:42 pm</td>
<td>198</td>
<td>EVALUATION OF ENDOSCOPIC STRIP CRANIECTOMY FOR BILATERAL CORONAL CRANIOSYNOSTOSIS AT TWO INSTITUTIONS</td>
<td>Gary Skolnick M.D.</td>
<td>Conor Williams, Matthew Smyth, Gary Skolnick M.D., Sybill Naidoo, Mark Proctor, Kamlesh Patel</td>
<td>Washington University School of Medicine in St. Louis</td>
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<tr>
<td>4:45 pm</td>
<td>199</td>
<td>INCIDENCE OF CRANIAL BASE SUTURE FUSION IN INFANTS WITH CRANIOSYNOSTOSIS</td>
<td>Jesse Taylor M.D.</td>
<td>Jesse Taylor M.D., Dan Mazzaferro, Ari Wes, Sanjay Naran, Scott Bartlett</td>
<td>The Childrens Hospital of Philadelphia</td>
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</table>
4:51 pm  Discussion (10 min)

5:01 pm  
Lectern 1  

200  
THE MORPHOMETRICS ABOUT ORBITAL AND MAXILLARY AREA AFTER CRANIOFACIAL OPERATION IN CHILDREN WITH PREMATURE CRANIOSYNOSTOSIS  
Presenter: Shen Weimin M.D. (3 min)  
Authors: Shili Jun, Shen Weimin, Gaoqing Wen, Kongliang Liang  
Institution: Department of Plastic Surgery, Children’s Hospital of Nanjing Medical University

5:04 pm  
Lectern 2  

201  
THE EFFECT OF PREOPERATIVE MOLDING HELMET ON CALVARIAL GROWTH OF PATIENTS WITH SAGITTAL SYNOSTOSIS  
Presenter: Asra Hashmi, MD (3 min)  
Authors: Asra Hashmi, MD, Asra Hashmi, MD, Sandeep Sood, MD, Nicole Steele, Arlene Rozzelle, MD  
Institution: Wayne State University/Detroit Medical Center

5:07 pm  
Lectern 1  

202  
SPRING-MEDIATED CRANIOPLASTY IN SAGITTAL SYNOSTOSIS: DOES AGE AT PLACEMENT AFFECT RESULTS?  
Presenter: Sanjay Naran M.D. (3 min)  
Authors: James Sun, Netanja S ter Maaten, Daniel M Mazzaferro, Sanjay Naran M.D, Scott P Bartlett, Jesse A Taylor  
Institution: Childrens Hospital of Philadelphia

5:10 pm  
Lectern 2  

203  
AN APPRAISAL OF THE CEPHALIC INDEX IN SAGITTAL CRANIOSYNOSTOSIS, AND THE UNSEEN 3RD DIMENSION  
Presenter: Jeffrey Fearon M.D. (6 min)  
Authors: Jeffrey Fearon M.D., Kanlaya Dittakasem, MNS, RN, Morley Herbert, PhD, John Kolar, PhD  
Institution: The Craniofacial Center

5:16 pm  
Lectern 1  

204  
LONG TERM FOLLOW UP IN CRANIOFACIAL OSTEOGENIC DISTRACTION WITH RESORBABLE DEVICES  
Presenter: Hector Malagon, M.D. (6 min)  
Authors: Hector Malagon, M.D., Vilchis Roberto, Ayala Fernan  
Institution: Head of Plastic Surgery/ Craniofacial Surgery

5:22 pm  
Discussion (9 min)

5:31 pm  
Lectern 2  

205  
OUTCOMES OF ENDOSCOPIC-ASSISTED SPRING-MEDIATED CRANIOPLASTY COMPARED TO OPEN SPRING-MEDIATED CRANIOPLASTY  
Presenter: Kyle Steven Gabrick (3 min)  
Authors: Christopher Michael Runyan, Kyle Steven Gabrick, Jungwon Genevieve Park, Edreca Allison Thompson, Daniel Couture, Lisa Renee David  
Institution: Wake Forest Baptist Medical Center
206
COGNITIVE ASSESSMENT IN SCHOOL AGE CROUZON AND PFEIFFER AFTER FRONTOFACIAL MONOBLOC
Presenter: Martin Rachwalski (3min)
Authors: X. Dahiez, L. Pamphile-Tabuteau, K. André, N. Angaud, M. Zerah, E. Arnaud, M. Rachwalski
Institution: Hospital Necker CF unit-Psychology

207
FRONTAL WIDENING AND REMODELING FOR SCAPHOCEHALIC CHILDREN OLDER THAN ONE
Presenter: X. L. Jing M.D. (3min)
Authors: Eric Arnaud, X. L. Jing M.D., G. Paternoster, S. James, X. Liu, M. Zerah
Institution: Hospital Necker craniofacial unit

208
UNTANGLING ASSOCIATIONS BETWEEN SURGICAL PARAMETERS AND HEAD SHAPE IN SPRING-ASSISTED CRANIOPLASTY
Presenter: NU Owase Jeelani M.D. (6 min)
Authors: Naiara Rodriguez-Florez, Jan L Bruse, Alessandro Borghi, Silvia Schievano, NU Owase Jeelani M.D., David J Dunaway
Institution: UCL GOS Institute of Child Health and Great Ormond Street Hospital for Children

209
THE USE OF CAD/ CAM TMJ PROSTHESSES IN PATIENTS WITH CONGENITAL CRANIOFACIAL DEFORMITIES
Presenter: Ignacio Garcia Recuero, MD (6 min)
Authors: Ignacio Garcia Recuero, A.I. Romance MD, M. Redondo Alamillos, G.S. Aniceto MD.PhD.
Institution: Oral and Maxillofacial Surgery ServiceI.H.U.

CRANIOSYNOSTOSIS AND PIERRE ROBIN
Moderators: Cassio E Raposso do Amaral, M.D, Alicia Sigler, MD

210
MANDIBULAR OSTEOGENIC DISTRACTION IN NEONATES WITH PIERRE ROBIN SEQUENCE - SEVENTEEN YEARS EXPERIENCE - RESULTS ON FIRST TWENTY CASES
Presenter: Marcus Collares M.D. (6 min)
Authors: Marcus Collares M.D, Mariana M Fraga, Denise Manica, Temis Felix, Jorge Morán, Simone Fagondes, Aline Tovo, Silvia Dorneles
Institution: University of Rio Grande do Sul - Brazil

211
CRANIOCERVICAL INSTABILITY IN PIERRE-ROBIN SEQUENCE ASSOCIATED WITH SKELETAL DYSPLASIA: CASE REPORT
Presenter: Jack E. Brooker M.D. (3 min)
Authors: Xiao Zhu, Jonathan Y. Lee, Jack E. Brooker M.D., Jesse A. Goldstein, Joseph E. Losee
Institution: University of Pittsburgh Department of Plastic Surgery
6:10 pm
Lectern 1
212
REACHING LINGUAL ORTHOTOPY IN OROPHARYNGEAL OBSTRUCTION - A TECHNIQUE PROPOSAL
Presenter: Jullyana Heinen Peixoto M.D. (3 min)
Authors: Vera Lucia Nocchi Cardim, Jullyana Heinen Peixoto M.D., Alessandra dos Santos Silva
Institution: Beneficência Portuguesa de São Paulo

6:13 pm
Lectern 2
213
MANDIBULAR MORPHOLOGY AFTER DISTRACTION OSTEOGENESIS IN SYNDROMIC PIERRE ROBIN SEQUENCE PATIENTS
Presenter: Renata Maricevich M.D. (3 min)
Authors: Renata Maricevich M.D., Wendy Chen, Jeffrey G Trost, Jr., Jesse A Goldstein, Joseph E Losee
Institution: Texas Childrens Hospital

6:16 pm
Lectern 1
214
PIERRE ROBIN SEQUENCE: STRATIFYING FEEDING DYSFUNCTION AND IDENTIFYING VARIABLES AFFECTING OUTCOME
Presenter: Wei Wei Lee M.D. (3 min)
Authors: Wei Wei Lee M.D., Wendy Chen, Joshua Barnett, Matthew Ford, Christal V Steinbach, Jesse A Goldstein
Institution: Childrens Hospital of Pittsburgh

6:19 pm
Discussion (10 min)

19:30-20:00
Farewell Dinner Reception. Foyer Grand Coral Room

20:00-23:00
Farewell Dinner. Grand Coral Room 1
### ROOM A

**08:30 – 09:30 am**

**CONCURRENT SESSION 11**  
**Facial Trauma**  
Moderators: Peter Taub, M.D., Anil Madaree, M.D.

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<td>8:30 am</td>
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<td>Lectern 1</td>
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FRONTAL SINUS FRACTURES: EVALUATION OF 19 CASES OF A UNIVERSITY HOSPITAL IN CAMPINAS, SÃO PAULO, BRAZIL  
Presenter: Rogerio A. Modesto de Abreu (3 min)  
Authors: Rogerio A. Modesto de Abreu, Daniella N. Camargo, Leticia Watanabe  
Institution: Pontifícia Universidade Católica de Campinas |
| 8:33 am | 216     |
| Lectern 2 |  
OPTIMIZATION OF ORBITAL FRACTURE FIXATION USING LOW-COST PATIENT SPECIFIC 3D PRINTED MODELS  
Presenter: Lucas Dvoracek M.D. (3 min)  
Authors: Lucas Dvoracek M.D., Jonathan Lee, Jignesh Unadkat, Joseph Losee, Jesse Goldstein  
Institution: University of Pittsburgh Department of Plastics Surgery |
| 8:36 am | 217     |
| Lectern 1 |  
A SYSTEMATIC REVIEW OF ENDOSCOPIC REPAIR OF MANDIBLE FRACTURES  
Presenter: Paymon Sanati-Mehrizy M.D. (3 min)  
Authors: Paymon Sanati-Mehrizy M.D., Benjamin B Massenburg, Rami D Sherif, Michael J Ingargiola, Saba Motakef, Peter J Taub  
Institution: Icahn School of Medicine at Mount Sinai |
| 8:39 am | 218     |
| Lectern 2 |  
THE HYBRID ARCH BAR IS A COST-BENEFICIAL ALTERNATIVE IN THE OPEN TREATMENT OF MANDIBULAR FRACTURES  
Presenter: Visakha Suresh, BS (3 min)  
Authors: Renata Khelemsky, DDS, MD, David B Powers, DMD, MD, FACS, FRCS, Seth Greenberg, DMD, Ellen Johnson SIlver, PhD, Visakha Suresh, BS, Michael Turner, DDS, MD  
Institution: Albert Einstein College of Medicine |
| 8:42 am | 219     |
| Lectern 1 |  
MANAGEMENT OF HIGH-ENERGY AVULSIVE BALLISTIC FACIAL INJURY: A REVIEW OF THE LITERATURE AND ALGORITHMIC APPROACH  
Presenter: Elbert E Vaca M.D. (6 min)  
Authors: Elbert E Vaca M.D. Justin L Bellamy, Sammy Sinno, Eduardo D Rodriguez  
Institution: Northwestern Memorial Hospital, Division of Plastic and Reconstructive Surgery |
| 8:48 am | Discussion (9 min) |
8:57 am
Lectern 2
220
COMPARATIVE ANALYSIS OF CUSTOM VS MANUALLY SHAPED IMPLANTS FOR ORBITAL FLOOR RECONSTRUCTION
Presenter: Reid Chambers M.D. (6 min)
Authors: Reid Chambers M.D., Joel Davies, Glenn Edwards, Amani Ibrahim, Michael Hardisty, Oleh Antonyshyn
Institution: Sunnybrook Hospital, University of Toronto

9:03 am
Lectern 1
221
ORBITAL FLOOR FRACTURE RECONSTRUCTION MATERIALS - A SYSTEMATIC REVIEW AND META-ANALYSIS
Presenter: Sean Cameron Smith M.D. (6 min)
Authors: Sean Cameron Smith M.D., Alain J. Azzi, Ashley Ignatiuk, Daniel A. Peters
Institution: University of Ottawa

9:09 am
Lectern 2
222
35 CONDYLAR FRACTURES IN 29 CHILDREN: DEMOGRAPHICS, TREATMENT, OUTCOMES, AND LONG-TERM GROWTH
Presenter: Wendy Chen M.D. (6 min)
Authors: Wendy Chen M.D., Jack E Brooker, Wei Wei Lee, Lindsay A Schuster, Jesse A Goldstein, Joseph E Losee
Institution: University of Pittsburgh Medical Center

9:15 am
Lectern 1
223
A REVIEW OF FRONTAL SINUS FRACTURES AND ASSOCIATED OCULAR COMPLICATIONS
Presenter: Rafael Galli, MD (3 min)
Authors: Alex Viezel-Mathieu, MD, Rafael Galli, MD, Lucie Lessard, MD, FRCSC, FRCSC, FACS
Institution: McGill University Health Centre

9:18 am
Lectern 2
224
AN ALGORITHMIC APPROACH TO RECONSTRUCTION OF THE ANTERIOR CRANIAL BASE IN DEVASTATING TRAUMA
Presenter: Sameer Shakir M.D. (3 min)
Authors: Sameer Shakir M.D., Phuong D. Nguyen
Institution: University of Pennsylvania

9:21 am
Discussion (9 min)
<table>
<thead>
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<tr>
<td>8:30 am</td>
<td>225</td>
<td>LONG-TERM RESULTS AFTER 25 YEARS EXPERIENCE WITH INTERDISCIPLINARY</td>
<td>Ricardo Bennun M.D.</td>
<td>Ricardo Bennun M.D., Julia Harfin</td>
<td>National University of Buenos Aires, Maimonides University, Asociacion PIEL</td>
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<td></td>
<td></td>
<td>TREATMENT OF MIDLINE FACIAL CLEFTS</td>
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<tr>
<td>8:36 am</td>
<td>226</td>
<td>AN INTEGRATED APPROACH TO THE MANAGEMENT OF MENINGIOENCEPHALOCELE</td>
<td>Greg Thomas M.D.</td>
<td>Greg Thomas M.D., Eric Tan, Jay Jayamohan, Peter Richards, Steven Wall,</td>
<td>Oxford Craniofacial Unit</td>
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<td>David Johnson</td>
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<tr>
<td>8:42 am</td>
<td>227</td>
<td>MANAGEMENT AND ETHICAL CONSIDERATIONS OF LARGE POSTERIOR ENCEPHALOCELE</td>
<td>Ingrid Ganske, MD.</td>
<td>Ingrid Ganske, MD, MPA, Samantha E. Hall, BA, John G. Meara, MD, DMD, MBA,</td>
<td>Boston Children’s Hospital</td>
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<td>Mark Proctor, MD</td>
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<tr>
<td>8:48 am</td>
<td>228</td>
<td>MUSCLE EXPANSION FOR TESSIER N3 AND N4 CRANIOFACIAL CLEFT TREATMENT</td>
<td>Adriana Guerrero M.D.</td>
<td>Adriana Guerrero M.D.</td>
<td>Hospital Metropolitano de Quito</td>
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<td>8:51 am</td>
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<td>DISCUSSION (10 min)</td>
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<td>9:01 am</td>
<td>229</td>
<td>TRANS-SPHENOIDAL ENCEPHALOCELE REPAIR: TIMING, TECHNICAL, AND PERIOPERATIVE CONSIDERATIONS</td>
<td>Amir Elbarbary, MD.</td>
<td>Amir Elbarbary, MD, Henry Kawamoto, MD, DDS, James P Bradley, MD</td>
<td>Ain Shams University, Cairo</td>
</tr>
<tr>
<td>9:04 am</td>
<td>230</td>
<td>CRANIOFACIAL CLEFTS LESSONS FROM A DECADE OF EXPERIENCE WITH 107 CASES</td>
<td>Charles Davis M.D.</td>
<td>Charles Davis M.D.</td>
<td>Wellington Craniofacial Unit</td>
</tr>
<tr>
<td>Time</td>
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<td>Title</td>
<td>Presenter(s)</td>
<td>Authors</td>
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<tr>
<td>9:10 am</td>
<td>231</td>
<td>A NOVEL RECONSTRUCTION TECHNIQUE FOR THE TESSIER 4 FACIAL CLEFT</td>
<td>Roberto Flores M.D.</td>
<td>Roberto Flores M.D., Christopher Runyan, Pradip Shetye, Elcin Esenlik, Lawrence Brecht, Barry Zide</td>
<td>NYU Langone Medical Center</td>
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<tr>
<td>9:22 am</td>
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<td>Discussion (8 min)</td>
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<td>09:30 – 10:00 am</td>
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<td>Visit to the Exhibit and Coffee Break</td>
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**ROOM A**

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<tr>
<th>Time</th>
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<th>Title</th>
<th>Presenter(s)</th>
<th>Authors</th>
<th>Institution</th>
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<tr>
<td>10:00 am</td>
<td>233</td>
<td>DETERMINING THE MOST CLINICALLY BENEFICIAL DONOR SITE FOR ALVEOLAR BONE GRAFTING IN CLEFT PALATE PATIENTS: A CRITICAL REVIEW OF THE LITERATURE</td>
<td>Kirun Baweja, BS</td>
<td>Kirun Baweja, BS</td>
<td>University of Edinburgh</td>
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<tr>
<td>10:03 am</td>
<td>234</td>
<td>DEVELOPMENT OF A SMART PHONE-BASED APPLICATION FOR MORPHOLOGIC CLEFT LIP DATA COLLECTION</td>
<td>Meghan McCullough M.D., Caroline Yao, MS, MD, Jordan Swanson, MD, Allyn Ausländer, MPH, Thomas Imahiyerobo, MD, William P. Magee III, DDS, MD</td>
<td>Meghan McCullough M.D., Caroline Yao, MS, MD, Jordan Swanson, MD, Allyn Ausländer, MPH, Thomas Imahiyerobo, MD, William P. Magee III, DDS, MD</td>
<td>University of Southern California</td>
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<tr>
<td>10:06 am</td>
<td>235</td>
<td>ALVEOLAR CLEFT SIZE ON PRENATAL ULTRASONOGRAPHY PREDICTS CLEFT OF THE SECONDARY PALATE</td>
<td>Eva Rubio M.D.</td>
<td>Eva Rubio M.D., Kenneth L. Fan, Anna Blask, Erin M. Rada, Gary F. Rogers</td>
<td>Childrens National Health System</td>
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10:09 am

236

BMP-2 ALVEOLAR BONE RECONSTRUCTION HAS IMPROVED BONE HEALING WITHOUT SIGNIFICANT DIFFERENCES IN DENTAL OUTCOMES
Presenter: Alexander Y. Lin, MD, FACS (3min)
Authors: Jeremy A. Goss, Dave S. Ho, BS, Jeremy A. Goss, MD, Margie S. Hunter, BS, Ross E. Long, Jr, DMD, Eric S. Armbrecht, PhD, Alexander Y. Lin, MD, FACS
Institution: Saint Louis University School of Medicine

10:12 am

237

A QUALITY-BASED APPROACH TO OPTIMIZE THE ALVEOLAR BONE GRAFT: AN IMPROVED PERI-OPERATIVE PAIN MANAGEMENT PROTOCOL
Presenter: Dr. Justin Dagget, M.D. (3 min)
Authors: Michael Bykowski, Wesley Sivak, Catey Garland, Franklyn Cladis, Jesse A Goldstein, Joseph E Losee, Dr. Justin Dagget, M.D.
Institution: Childrens Hospital of Pittsburgh

10:15 am

238

PRIMARY CORRECTION OF THE NASAL DEFORMITY IN UNILATERAL CLEFT LIP PATIENTS: MERGING THE PAST WITH THE PRESENT TO ACHIEVE A SATISFACTORY OUTCOME
Presenter: Maria del Carmen Moreno Alvarez M.D. (3 min)
Authors: Jordi Puente Espel, Maria del Carmen Moreno Alvarez M.D.
Institution: Hospital General de Mexico Eduardo Liceaga

10:18 am

239

COMPARISON OF CASO4 TO CAPO4 IN PRIMARY ALVEOLAR CLEFT REPAIR
Presenter: Spiros Lazarou MD (3 min)
Authors: Spiros Lazarou
Institution: Chief, Pediatric Plastic & Craniomaxillofacial Surgery, Iaso Pediatric Hospital

10:21 am

Discussion (10 min)

10:31 am

240

ROLE OF DISTRACTION OSTEOGENESIS IN THE MANAGEMENT OF CRANIO- AND DENTOFACIAL ANOMALIES
Presenter: Nicolai Adolphs M.D. (3 min)
Authors: Nicolai Adolphs M.D., Nicole Ernst
Institution: Dept. of Craniomaxillofacial Surgery, Charit University Medicine, Berlin

10:34 am

241

BIPLANAR MANDIBLE CONTOURING: DESIGN AND NAVIGATED OSTEOTOMY
Presenter: Min Wei, M.D. (3 min)
Authors: Min Wei, M.D., Zheyuan Yu, Liang Xu, Jie Yuan
Institution: Dept. of PRS, Shanghai Ninth People Hospital

10:37 am

242

USE OF DISTRACTION OSTEOGENESIS IN CLEFT PATIENTS SKELETAL SEQUELS
Presenter: Carlos Marcelo Cerullo M.D. (3 min)
Authors: Carlos Marcelo Cerullo M.D., Tohus Guillermo Andrés
Institution: Hospital Italiano de Buenos Aires
10:40 am
Lectern 1

243
CHANGES TO THE CLEFT NOSE AESTHETIC AFTER LEFORT I ADVANCEMENT: A 3D ANALYSIS
Presenter: Irene Ma, M.D. (3 min)
Authors: Irene Ma, Jonathan Lee, Loni Mae Brueckmann, Ian Chow, Joseph Losee, Jesse Goldstein
Institution: University of Pittsburgh Medical Center

10:43 am
Lectern 2

244
COMBINED LE FORT 3/LE FORT 1 ORTHOGNATHIC PROCEDURES IN PATIENTS WITH CLEFT LIP AND PALATE: ESTHETIC RESULTS IN THE GLOBALLY MIDFACE DEFICIENT PATIENT
Presenter: Michael Lypka (3 min)
Authors: Michael Lypka, Kevin Xiao
Institution: Children's Mercy Hospital

10:46 am
Lectern 1

245
TREATMENT OF OBSTRUCTIVE SLEEP APNEA WITH ORTOGNACTIC SURGERY IN PATIENTS WITH CLEFT LIP AND PALATE
Presenter: Diana Marcela Diaz Lopez M.D. (3 min)
Authors: Diana Marcela Diaz Lopez, Rolando Prada, Diana Gómez, Tatiana Palomino
Institution: Fundación Universitaria de Ciencias de la Salud

10:49 am
Lectern 2

246
INTRAORAL DISTRACTION OSTEOGENESIS IN CLEFT PATIENTS
Presenter: Cesar Guerrero, M.D. 6 min)

10:55 am
Discussion (10 min)

11:05 am
Lectern 1

247
ORTHOGNATHIC SURGERY IN PREVIOUSLY DISTRACTED MANDIBLES
Presenter: Adriana Guerrero M.D. (6 min)
Authors: Jacobo Felemovicius, Adriana Guerrero M.D., Sara Contreras
Institution: Hospital General Dr. Manuel Gea Gonzalez

11:11 am
Lectern 2

248
LONG TERM STABILITY OF LE FORT 1 DISTRACTION OSTEOGENESIS IN PATIENTS WITH CLEFT LIP AND PALATE
Presenter: Jordi Puente-Espel (6 min)
Authors: Carlos Raul Barcelo M.D., David G. Genecov, Jordi Puente-Espel
Institution: International Craniofacial Institute, Dallas TX

11:17 am
Lectern 1

249
DISTRACTION OSTEOGENESIS IN THE GROWING MAXILLA: LONG TERM RESULTS IN 41 CONSECUTIVE PATIENTS
Presenter: Eugenia Page M.D (6 min)
Authors: Eugenia Page M.D, Joseph Williams, Fernando Burstein, Paul Ghareeb, Stefanie Hush, Brentley Taylor
Institution: Emory University School of Medicine
### Scientific Program

**Grand Coral Ballroom**

**Saturday, October 28th, 2017**

#### 11:23 am

**Lectern 2**

250  
**CURRENT INDICATIONS AND EXPERIENCE WITH MAXILLARY DISTRACTION AT A HIGH VOLUME CENTER**  
Presenter: Paul Ghareeb M.D. (3 min)  
Authors: Paul Ghareeb, Joseph K Williams  
Institution: Emory University School of Medicine, Division of Plastic Surgery

11:26 am  
Discussion (10 min)

### ROOM B

#### 10:00 – 11:30 am

**CONCURRENT SESSION 12**  
Cleft, Lip and Palate, Velopharyngeal Deficiency and Cleft Rhinoplasty  
Moderators: Kennet Salyer, M.D., Robert Menard, M.D.

**10:00 am**  
**Lectern 1**  
251  
**THE COMMON NEEDS OF ADULT PATIENTS WITH CLEFT LIP AND/OR PALATE**  
Presenter: Nicole Kurnik (3 min)  
Authors: Nicole Kurnik, MD, Stephen Beals, MD, Katharine Connolly, MD, Davinder Singh, MD, Patricia Glick, DMD, Tuan Truong, MD  
Institution: Mayo Clinic Arizona, Department of Plastic Surgery

10:03 am  
**Lectern 2**  
252  
**WITHDRAWN**  
**AESTHETIC OUTCOMES IN UNILATERAL CLEFT LIP: COMPARISON OF MODIFIED MILLARD VERSUS FISHER REPAIR**  
Presenter: Kirstin Miteff, M.D. (3min)  
Authors: Carly Fox, M.D., Kirstin Miteff, M.D., Yun Phua, M.D., Susan O'Mahony, M.D., Richard Theile, M.D., Stuart Bade, M.D.  
Institution: Lady Cilento Children's Hospital, Brisbane Australia

10:06 am  
**Lectern 1**  
253  
**VOLUMETRIC EVALUATION OF ALVEOLAR CLEFT GRAFTING METHOD: BONE SUBSTITUTES VS AUTOLOGOUS BONE**  
Presenter: Federica Ruggiero, M.D. (3 min)  
Authors: Federica Ruggiero, M.D.Giovanni Badiali, Enrico Costabile, Claudio Marchetti, Alberto Bianchi  
Institution: Oral and Maxillo-facial Surgery Dept, S.Orsola University Hospital Bologna, Universities of Parma Bologna Ferrara

10:09 am  
**Lectern 2**  
254  
**HIGH-FIDELITY CLEFT LIP SIMULATION - TAKING SURGICAL REALISM TO NEW HEIGHTS**  
Presenter: Francesca Saldanha, M.D. (3 min)  
Authors: Francesca Saldanha, Andrew Hosmer, Maeve Geary, Peter Weinstock, Carolyn Rogers-Vizena  
Institution: Boston Childrens Hospital
255
THE DILEMMA OF THE MANAGEMENT OF CLEFT PALATE IN AN APERT PATIENT:
A RETROSPECTIVE ANALYSIS OF 43 PATIENTS
Presenter: Herman Jr Vercruysse, M.D. (3 min)
Authors: Herman Jr Vercruysse M.D., Juling Ong, Nivi Behari, Caroleen Shipster,
David Dunaway
Institution: Craniofacial Unit, Great Ormond Street Hospital for Children, London,
United Kingdom

256
RHBMP-2/DBM VS. ICBG FOR SECONDARY ALVEOLAR BONE GRAFTS IN PATIENTS
WITH CLP: REVIEW OF 501 CASES
Presenter: Daniel J. Gould, MD
Authors: Daniel J. Gould, MD, PhD. (3 min), Artur Fahradyan, MD, Fan Liang, MD,
William Magee III, MD, DDS, Mark M. Urata, MD, DDS, Jeffrey A. Hammoudeh,
MD, DDS
Institution: Keck School of Medicine of USC

257
THE SKOOG LIP REPAIR FOR UNILATERAL CLEFT LIP DEFORMITY - EXPERIENCE
FROM 443 CASES
Presenter: Daniel Nowinski M.D. (3 min)
Authors: Daniel Nowinski M.D., Alberto Falk-Delgado, Anna Lang, Malin Hakelius,
Valdemar Skoog, Daniel Nowinski
Institution: Department of surgical sciences, plastic surgery, Uppsala university

258
CONVERSION FURLOW PALATOPLASTY AND THE USE OF PRE-OPERATIVE VIDEO
NASENDOSCOPY
Presenter: Alison Kaye, MD (3min)
Authors: Alison Kaye, MD, Meghan Tracy, BA/BS, Kathryn Dent, MS, CCC-SLP
Institution: Childrens Mercy Kansas City

259
TEMPOROPARIETAL FASCIA FLAP FOR GIANT ORONASAL FISTULA
RECONSTRUCTION IN CLEFT PATIENTS
Presenter: Enrique Olivares M.D. (3 min)
Authors: Enrique Olivares M.D., Saturnino Santos, Laura Larraga-Nieto,
Natalia Munoz-Ollero, Beatriz Gonzalez-Meli, Maria Jose Cimadevilla
Institution: Universidad Europea. Hospital Universitario Nino Jesus. Madrid. Spain

260
PREOPERATIVE AND POSTOPERATIVE POLYSOMNOGRAM IN CHILDREN UNDER
WENT PRIMARY PALATOPLASTY
Presenter: Diana Carolina Gomez Prada, M.D. (3 min)
Authors: Diana Carolina Gomez Prada, M.D., José Rolando Prada, Patricia Panqueva
Institution: Hospital Infantil Universitario de San José
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<tr>
<th>Time</th>
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<th>Authors</th>
<th>Institution</th>
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<tr>
<td>10:40 am</td>
<td>Lectern 1</td>
<td>SECONDARY PHARYNGOPLASTY: MANAGEMENT AND OUTCOMES</td>
<td>John H. Pang M.D.</td>
<td>John H. Pang M.D., Xiao Zhu, Isaac James, Jack E. Brooker, Jesse A. Goldstein, Joseph E. Losee</td>
<td>University of Pittsburgh Department of Plastic Surgery</td>
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<tr>
<td>10:43 am</td>
<td>Lectern 2</td>
<td>ACELLULAR DERMAL MATRIX IN PRIMARY PALATOPLASTY: A PROSPECTIVE TRIAL</td>
<td>Alexander Govshievich M.D.</td>
<td>Salah Aldekhayel, Alexander Govshievich, Mirko Gilardino</td>
<td>McGill University</td>
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<td>10:46 am</td>
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<td>Discussion (10 min)</td>
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<td>10:56 am</td>
<td>Lectern 1</td>
<td>SPEECH OUTCOMES IN FURLOW PALATOPLASTY VERSUS STRAIGHT-LINE INTRAVELAR VELOPLASTY</td>
<td>Laura A. Monson, MD</td>
<td>Tara Braun, Edward P. Buchanan, Kristina D. Wilson, PhD, SLP, Ellen E. Moore, MA, SLP, Cristina Hernandez, RN, Laura A. Monson, MD</td>
<td>Baylor College of Medicine</td>
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<td>11:02 am</td>
<td>Lectern 1</td>
<td>LONG TERM OUTCOMES IN INTERMEDIATE TIP RHINOPLASTY IN THE UNILATERAL CLEFT PATIENT</td>
<td>Julia Ayeroff M.D.</td>
<td>Julia Ayeroff M.D., Elizabeth J. Volpicelli, Thomas Willson, Sam Asanad, Rachel S. Mandelbaum, James P. Bradley, Justine C. Lee</td>
<td>University of California Los Angeles</td>
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<td>11:08 am</td>
<td>Lectern 2</td>
<td>THE PUSHBACK PHARYNGEAL FLAP: A 17-YEAR EXPERIENCE</td>
<td>Robert M Menard M.D., FACS.</td>
<td>Robert M Menard M.D., FACS., Danielle H Rochlin MD, Paul A Mittermiller MD, Clifford C Sheckter MD</td>
<td>Division of Plastic and Reconstructive Surgery, Stanford University School of Medicine, Stanford, CA, USA; Northern California Kaiser Permanente Craniofacial Clinic, Department of Plastic Surgery, Kaiser Permanente Santa Clara, Santa Clara, CA, USA</td>
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<td>11:14 am</td>
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<td>Discussion (10 min)</td>
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11:30 – 12:30 pm  GENERAL SESSION 4

Panel: “Interaction between Craniofacial Surgery and Orthodontics”
Moderator: Juan Carlos Rodríguez, M.D. (Argentina)

Speakers: Jeff Marcus, M.D., Pedro Santiago, D.D.S.
Orthognatic Surgery: Roberto Flores, M.D., Shetye Pradip, D.D.S.
Severe Midface Deficiency: David Dunaway, M.D., Alvaro Figueroa, D.D.S.
E-POSTERS
10:30-10:45 AM  
**e-poster 1**  
**Computer 1**  
**Three-Dimensional Assessment of Zygomatic Malunion Using Computed Tomography in Patients with Cheek**  
Presenter: Yung Ki Lee  
Authors: Yung Ki Lee, Baek Kyu Kim, Rong Min Baek, Chang Sik Pak  
Institution: Kyung Hee University Hospital

10:30-10:45 AM  
**e-poster 2**  
**Computer 2**  
**Use of Orthodontics for Maxilla-Mandibular Fixation in Pediatric Mandibular Fracture: A Case Series**  
Presenter: Renata S Maricevich  
Authors: Wendy Chen, Lindsay A Schuster, Brian S Martin, Renata S Maricevich  
Institution: University of Pittsburgh Medical Center

10:30-10:45 AM  
**e-poster 3**  
**Computer 3**  
**Reconstruction of auricular defect after human bite using advanced auricular skin cartilage flap cov**  
Presenter: Ji Min Kim  
Authors: Ji Min Kim, Min Gyu Park  
Institution: Seoul St. Mary Hospital

10:30-10:45 AM  
**e-poster 4**  
**Computer 4**  
**Towards inclusion of parental assessments in nonsynostotic plagiocephagy research**  
Presenter: Peter J. Taub  
Authors: Hope Weissler, Peter J. Taub  
Institution: Icahn School of Medicine at Mount Sinai

10:30-10:45 AM  
**e-poster 5**  
**Computer 5**  
**Management of Frontal Sinus Fractures: A 12-Year Experience at a Level 1 Trauma Center**  
Presenter: Ian C. Hoppe  
Authors: Ian C. Hoppe, Jerette Schultz, Jordan Halsey, Edward S. Lee, Mark S. Granick  
Institution: Rutgers, New Jersey Medical School

10:30-10:45 AM  
**e-poster 6**  
**Computer 6**  
**A Safe and Effective Method to Transfer Pedicle Vessels in Free Flap Reconstruction**  
Presenter: Hyo Young Kim  
Authors: Hyung Suk Yi, Hyo Young Kim, Hong Il Kim, Jin Hyung Park  
Institution: Kosin University College of Medicine

10:30-10:45 AM  
**e-poster 7**  
**Computer 7**  
**Regression of Cephalic Index following Endoscopic Repair of Sagittal Synostosis**  
Presenter: Naidoo, Sybill D  
Authors: Pickersgill, Nicholas A, Skolnick, Gary B, Naidoo, Sybill D, Woo, Albert S, Smyth, Matthew D, Patel, Kamlesh B  
Institution: Washington University School of Medicine in St. Louis
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<th>Presenter</th>
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<tr>
<td>10:30-10:45 AM</td>
<td>8</td>
<td>e-poster 8</td>
<td>Is there an epidemiological shift in non-syndromic, single-suture craniosynostosis? Results from a literature review and a national survey of craniofacial and neurosurgeons.</td>
<td>Michael Golinko</td>
<td>Alex Han, Michael Golinko</td>
<td>University of Arkansas for Medical Sciences</td>
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<td>10:30-10:45 AM</td>
<td>9</td>
<td>e-poster 9</td>
<td>Use of in situ simulation to improve management of massive hemorrhage during craniofacial surgery</td>
<td>Sumit Das</td>
<td>Sumit Das, Arnwald Choi</td>
<td>Oxford Craniofacial Unit, UK</td>
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<td>10:30-10:45 AM</td>
<td>11</td>
<td>e-poster 11</td>
<td>Vermillion only cross-lip flap for treatment of whistle deformity in secondary bilateral cleft lip repair</td>
<td>Robert Menard</td>
<td>Danielle Rochlin, Clifford Sheckter, Paul Mittermiller, Robert Menard</td>
<td>Stanford</td>
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<td>10:30-10:45 AM</td>
<td>12</td>
<td>e-poster 12</td>
<td>Airway management through submittal derivation. Safe and easily reproduced alternative for patients with complex facial trauma.</td>
<td>García Cano Eugenio</td>
<td>Malagón Hidalgo Héctor Omar, García Cano Eugenio, González Magaña Fernando, Vilchis López Roberto, Fentanes Vera Adriana, Ayala Ugalde Fernan Alejandra</td>
<td>Instituto de Seguridad Social del Estado de México y Municipios</td>
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<tr>
<td>10:30-10:45 AM</td>
<td>13</td>
<td>e-poster 13</td>
<td>Intermaxillary Fixation Efficacy With Titanium Screws In Patients With Facial Fractures And Dentofacial Deformities</td>
<td>García Cano Eugenio</td>
<td>Malagón Hidalgo Héctor Omar, García Cano Eugenio, González Magaña Fernando, González Chapa Diego Raúl</td>
<td>Instituto de Seguridad Social del Estado de México y Municipios</td>
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<tr>
<td>10:45-11:00 AM</td>
<td>14</td>
<td>e-poster 14</td>
<td>Correction of severe hypertelorbitism with nasoethmoid encephalocele during infancy</td>
<td>Amir Elbarbary</td>
<td>Amir Elbarbary, Walid Abdel Ghany, Assem Abdel Latif</td>
<td>Plastic Surgery, Ain-Shams University</td>
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<td>10:45-11:00 AM</td>
<td>Computer 2</td>
<td>e-poster 15</td>
<td>Reossification of anterior skull base with pericranial flaps after frontofacial monobloc</td>
<td>Anne Morice</td>
<td>Anne Morice, G. Paternoster, A. Ostertag, S. James, RH Khonsari, E. Arnaud</td>
<td>Hospital Necker craniofacial unit</td>
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<tr>
<td>10:45-11:00 AM</td>
<td>Computer 3</td>
<td>e-poster 16</td>
<td>Evolution of Spring-Assisted Calvarial Expansion for Bicoronal Craniosynostosis</td>
<td>Lisa Renee David</td>
<td>Christopher Runyan, Kyle Steven Gabrick, Jungwon Genevieve Park, Edreca Allison Thompson, Daniel Couture, Lisa Renee David</td>
<td>Wake Forest Baptist Medical Center</td>
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<tr>
<td>10:45-11:00 AM</td>
<td>Computer 4</td>
<td>e-poster 17</td>
<td>Skoog Primary Periosteoplasty versus Secondary Alveolar Bone Grafting in Unilateral Cleft and Alveolus: Long-term Effects on Alveolar Bone Formation and Maxillary Growth</td>
<td>Malin Hakelius</td>
<td>Fatima Jabbari, Malin Hakelius, Andreas Thor, Erika Reiser, Valdemar Skoog, Daniel Nowinski</td>
<td>Dpt of Plastic- and Maxillofacial Surgery, Uppsala University Hospital, Sweden</td>
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<td>10:45-11:00 AM</td>
<td>Computer 5</td>
<td>e-poster 18</td>
<td>Comparison Between Oximetry and Polysomnography in Identifying Airway Obstruction in Infants with Robin Sequence</td>
<td>Rafael Galli</td>
<td>Rafael Galli, Mirko Gilardino, Lucie Lessard, Aurore Côté</td>
<td>McGill University</td>
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<td>10:45-11:00 AM</td>
<td>Computer 7</td>
<td>e-poster 20</td>
<td>Cost Effectiveness Analysis of Demineralized Bone Matrix and rhBMP-2 vs. autologus iliac crest grafting in Alveolar Cleft Patients</td>
<td>Sagar Mehta</td>
<td>Sagar Mehta, Barbu Gociman, Faizi Siddiqi, Duane Yamashiro, Ross Blagg, James Willcockson</td>
<td>University of Utah</td>
</tr>
</tbody>
</table>
10:45-11:00 AM  
**e-poster 21**  
The Clinical Effect of Surgery-first Approach for Correcting Adult Skeletal Class Three Malocclusion  
Presenter: Guoping WU  
Authors: Guoping WU, Cunlong Li, Wensong Shangguan, Bin Zhou, Hao Dai, Wenwen Zhang, Shu Wang  
Institution: The Affiliated Friendship Plastic Surgery Hospital of Nanjing Medical University  

10:45-11:00 AM  
**e-poster 22**  
Abandoning the Supraorbital Bandeau: A Single-Piece Reconstruction for Anterior Craniosynostoses  
Presenter: Jose Castro Garcia, MD  
Authors: Jeffrey Fearon, Kanlaya Ditthakasem, MNS, RN, Jose Castro Garcia, MD, Morley Herbert, PhD  
Institution: The Craniofacial Center, Dallas  

10:45-11:00 AM  
**e-poster 23**  
20 Years Using Springs in Craniofacial Surgery  
Presenter: Giovanni Maltese  
Authors: Peter Tarnow, Giovanni Maltese, Madiha Bhatti Softeland, Robert Olsson, Lars Kolby  
Institution: Dept of Plastic Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden  

10:45-11:00 AM  
**e-poster 24**  
Lip reconstruction in animal and human bite injuries: a holistic approach  
Presenter: Jordi Puente-Espel  
Authors: Jordi Puente-Espel, Maria del Carmen Moreno Alvarez  
Institution: Hospital General de Mexico Dr Eduardo Liceaga  

10:45-11:00 AM  
**e-poster 25**  
Four-Year Experience in Treating Syndromic Craniosynostosis in Eastern Indonesia  
Presenter: Indri Lakhsmi Putri  
Authors: Magda Hutagalung, Lobredia Zarasade, Indri Lakhsmi Putri  
Institution: Department of Plastic Reconstructive and Aesthetic Surgery, Airlangga University  

4:00-4:15 PM  
**e-poster 26**  
Treatment for the jaw deformity of hemifacial microsomia Pruzansky grade I  
Presenter: Takayuki Okumoto  
Authors: Takayuki Okumoto, Yoshikazu Inoue, Takanori Miyajima, Suguru Kondo  
Institution: Department of Plastic and Reconstructive Surgery, Fujita Health University School of  

4:00-4:15 PM  
**e-poster 27**  
Craniotomy of the fused sagittal suture over the superior sagittal sinus is a safe procedure  
Presenter: Sara Fischer  
Authors: Sara Fischer, Maltese, Giovanni, Olsson, Robert, Tarnow, Peter, Kolby Lars  
Institution: Department of Plastic Surgery, Institute for Clinical Sciences, Gothenburg University
4:00-4:15 PM  
**Computer 3**  
e-poster 28  
**SLCA2A5 Mutation in a Patient with Systemic Primary Carnitine Deficiency and cleft palate: Successful perioperative management**  
Presenter: Ching -Wei Hu  
Authors: Lun-Jou Lo, Ching -Wei Hu, Ching-Hsuan Hu, Yah-Huei Wu-Chou  
Institution: Department of Plastic and Reconstructive Surgery, Chang Gung Memorial Hospital

4:00-4:15 PM  
**Computer 4**  
e-poster 29  
**Repeated Honeycomb Posterior Cranial Vault Distraction for Pfeiffer Syndrome: a case report**  
Presenter: Yorikatsu Watanabe  
Authors: Yorikatsu Watanabe, Mayu Takahashi, Tanetaka Akizuki, Shigeru Nishizawa  
Institution: Department of Plastic and Reconstructive Surgery, Tokyo Metropolitan Police

4:00-4:15 PM  
**Computer 5**  
e-poster 30  
**Preoperative Alveolar Segment Position as a Predictor of Gingivoperiosteoplasty in Patients with Unilateral Cleft Lip and Palate**  
Presenter: Jonathan M. Bekisz  
Authors: Jonathan M. Bekisz, Elcin Esenlik, Travis Gibson, Court B. Cutting, Barry H. Grayson, Roberto L. Flores  
Institution: New York University School of Medicine

4:00-4:15 PM  
**Computer 6**  
e-poster 31  
**Pediatric Cleft Surgery in Global Health: A Scoping Review**  
Presenter: Kimia Sorouri  
Authors: Kimia Sorouri, Karen Y Chung, Tanishq Suryavanshi, David M Fisher  
Institution: University of Toronto

4:00-4:15 PM  
**Computer 7**  
e-poster 32  
**An Impossible Case Made Possible**  
Presenter: Ingrid Ganske, MD, MPA  
Authors: Ingrid Ganske, MD, MPA, Noah Schulz, MSME, Katie Livingston, ME, Susan Goobie, MD, FRCPC, John G. Meara, MD, DMD, MBA, Mark Proctor, MD, Peter Weinstock, MD, PhD  
Institution: Boston Childrens Hospital

4:00-4:15 PM  
**Computer 8**  
e-poster 33  
**The Influence of Congenital versus Acquired Facial Palsy on Dynamic Facial Reanimation in Children**  
Presenter: Phuong D. Nguyen  
Authors: Phuong D. Nguyen, Kristin Faschan, Daniel M. Mazzaferro, Tami Konieczny, Oksana A. Jackson, Scott P. Bartlett  
Institution: Childrens Hospital of Philadelphia
4:00-4:15 PM  
e-poster 34  
**Unsolvable cases**  
**Association of dynamic osteotomies in the treatment of the cloverleaf skull**  
Presenter: Alessandra dos Santos Silva  
Authors: Alessandra dos Santos Silva, Anderson Rodrigo Souza, Vera Lucia Nocchi Cardim  
Institution: Beneficência Portuguesa de São Paulo

4:00-4:15 PM  
e-poster 35  
**Intracranial hypertension and neuropsychomotor development in craniosynostosis - preliminary study**  
Presenter: Anderson Rodrigo Souza  
Authors: Anderson Rodrigo Souza, Alessandra dos Santos Silva, Denise Gonçalves Cunha Coutinho, Vera Lucia Nocchi Cardim  
Institution: Beneficência Portuguesa de São Paulo

4:00-4:15 PM  
e-poster 36  
**Dynamic osteotomies in mature skulls**  
Presenter: Georgia Maria de Carvalho Perez  
Authors: Vera Lucia Nocchi Cardim, Georgia Maria de Carvalho Perez, Alessandra dos Santos Silva, Anderson Rodrigo Souza  
Institution: Beneficência Portuguesa de São Paulo

4:00-4:15 PM  
e-poster 37  
**Assessment of Cranioplasty and Flap Techniques Utilized for Composite Scalp/Skull Reconstruction**  
Presenter: James D Vargo MD  
Authors: James D Vargo MD, Wojciech Przylecki MD, Paul Camarata MD, Brian T Andrews MD  
Institution: University of Kansas Medical Center

4:00-4:15 PM  
e-poster 38  
**The role of the Craniofacial orthodontists for treatment of patients with cleft lip and palate**  
Presenter: Suguru Kondo  
Authors: Suguru Kondo, Yoshimi Sano, Takayuki Okumoto  
Institution: Department of Orthodontics and Pedodontics, Plastic and Reconstructive Surgery

4:15-4:30 PM  
e-poster 39  
**Postoperative evaluation of sagittal synostosis after spring-assisted surgery using 3D imaging**  
Presenter: Ruggero Bevilaqua  
Authors: Ruggero Bevilaqua, Lars Kolby, Peter Tarnow, Giovanni Maltese  
Institution: Plastic Surgery Department, Sahlgrenska University Hospital, Göteborg, Sweden
E-Posters

Wednesday, October 25th, 2017
Foyer Grand Coral Ballroom

4:15-4:30 PM  e-poster 40
Computer 2  A Breakthrough in Maxillary Lefort II Fracture Reconstruction: A Case Series of Open Reduction and Internal Fixation Combined with Augmentation Rhinoplasty Using Autologous Materials
Presenter:  Indri Lakhsmi Putri
Authors:  Indri Lakhsmi Putri, Wilma Agustina
Institution:  Department of Plastic Reconstructive and Aesthetic Surgery, Airlangga University

4:15-4:30 PM  e-poster 41
Computer 3  An interim report of five trigonocephaly cases after eight years followup from cranioplasty
Presenter:  Yuuki Uchida
Authors:  Yuuki Uchida, Atsuomi Saiga, Nobuyuki Mitsukawa, Kaneshige Satoh
Institution:  St. Mary's Hospital

4:15-4:30 PM  e-poster 42
Computer 4  Transfusion Trends in Fronto-Orbital Advancement - An Analysis of 700 cases in the UK National Craniofacial Service
Presenter:  Mr Chris Parks
Authors:  Mr Christian Duncan, Mr Chris Parks, Dr Ed Carver, Dr Russell Evans, Dr David De Beers, Dr M. Stanley
Institution:  Alder Hey Childrens Hospital NHS Foundation Trust

4:15-4:30 PM  e-poster 43
Computer 5  Craniofacial Necrotizing fasciitis in an infant
Presenter:  Malagón Hidalgo Héctor Omar
Authors:  Perez Dosal Marcia Rosario, Malagón Hidalgo Héctor Omar, García Cano Eugenio, Reynoso López Rocío Evangelina, González Chapa Diego Raúl
Institution:  Instituto Nacional de Pediatría

4:15-4:30 PM  e-poster 44
Computer 6  A Five Step Simplification of the Fisher Anatomical Subunit Cleft Lip Repair
Presenter:  Anna Carlson, MD
Authors:  Anna Carlson, MD, Kate Buretta, MD, Jeffrey Marcus, MD
Institution:  Duke University Hospital Division of Plastic Surgery

4:15-4:30 PM  e-poster 45
Computer 7  Navigation-Assisted Endoscopic Orbital Decompression for refractory Graves’ orbitopathy
Presenter:  Hu, Ching hsuan
Authors:  Hu, Ching hsuan, Chia-Hsuan Tsai, Yu hsuan Hsieh, Chun-Hao Pan, Chein-Tzung Chen
Institution:  Chang Gung Memorial hospital

4:15-4:30 PM  e-poster 46
Computer 8  The Rare Association of Cleft Lip/Palate and Wilms Tumor
Presenter:  Alison Kaye, MD
Authors:  Elizabeth Theng, Alison Kaye, MD
Institution:  University of Missouri-Kansas City School of Medicine
4:15-4:30 PM  e-poster 47
Computer 9  Correlation of soft-tissue to bony landmarks during Le Fort I orthognathic surgery
Presenter: Derek Steinbacher, MD
Authors: Cynthia Tsay, Derek Steinbacher, MD
Institution: Yale School of Medicine

4:15-4:30 PM  e-poster 48
Computer 10  Wolf-Hirschhorn Syndrome with Cleft Lip/Palate: Patient Presentation and Management
Presenter: Shikhar Tomur
Authors: Shikhar Tomur, Alison Kaye
Institution: University of Missouri-Kansas City School of Medicine

4:15-4:30 PM  e-poster 49
Computer 11  The association between surgical complications and the POSSUM score in head and neck reconstruction
Presenter: Yohjiroh Makino
Authors: Yohjiroh Makino, Katsuhiro Ishida, Keita Kishi, Takeshi Miyawaki
Institution: The Jikei University school of Medicine

4:15-4:30 PM  e-poster 50
Computer 12  A Craniometric Analysis of Cranial Base and Cranial Vault Differences in Patients with Metopic Craniosynostosis
Presenter: Sanjay Naran
Authors: Sanjay Naran, Danial Mazzaferro, Ari Wes, Arastoo Vossough, Scott Bartlett, Jesse Taylor
Institution: University of Pennsylvania
E-Posters
Thursday, October 26th, 2017
Foyer Grand Coral Ballroom

9:30-9:45 AM e-poster 51
Computer 1
More Than Meets The Eye: The Effect of Intercanthal Distance on Perception of Beauty and Personality
Presenter: Sanjay Naran
Authors: Sanjay Naran, Ari Wes, Daniel Mazzaferro, Scott Bartlett, Jesse Taylor
Institution: University of Pennsylvania

9:30-9:45 AM e-poster 52
Computer 2
Minor Suture Fusion in Syndromic Craniosynostosis
Presenter: Christopher Runyan
Authors: Christopher Runyan, Wen Xu, David Staffenberg, Roberto Flores, Jesse Taylor
Institution: Wake Forest Baptist Medical Center

9:30-9:45 AM e-poster 53
Computer 3
Speech Outcomes Following Midface Distraction in Syndromic Craniosynostosis
Presenter: James Sun
Authors: James Sun, Ari M Wes, Sanjay Naran, Daniel Mazzaferro, Scott P Bartlett, Jesse A Taylor
Institution: Childrens Hospital of Philadelphia

9:30-9:45 AM e-poster 54
Computer 4
Cleft Repair in Pierre Robin Sequence Following Mandibular Distraction Osteogenesis
Presenter: Matthew B. Lorenzo, BA
Authors: Matthew B. Lorenzo, BA, Ari M. Wes, BA, Daniel Mazzaferro, MBA, Sanjay Naran, MD, Scott P. Bartlett, MD, Jesse A. Taylor, MD
Institution: The Childrens Hospital of Philadelphia

9:30-9:45 AM e-poster 55
Computer 5
Nasal Root Deviation in Unicoronal Craniosynostosis: A Craniometric Analysis of Early and Late Postoperative Outcomes
Presenter: Ari Wes
Authors: Jason Wink, Ari Wes, Dan Mazzaferro, Sanjay Naran, Scott Bartlett, Jesse Taylor
Institution: Children’s Hospital of Philadelphia

9:30-9:45 AM e-poster 56
Computer 6
 Craniosynostosis Surgery: Does Hospital Case-Volume Impact Outcomes or Cost?
Presenter: Rachel Mckenna
Authors: Rachel Mckenna, Ari Wes, Dan Mazzaferro, Sanjay Naran, Scott Bartlett, Jesse Taylor
Institution: Children's Hospital of Philadelphia

9:30-9:45 AM e-poster 57
Computer 7
Analysis of Practice Settings for Craniofacial Surgery Fellowship Graduates in North America
Presenter: Christopher Runyan
Authors: Christopher Runyan, Jason Silvestre, Jesse Taylor
Institution: Wake Forest Baptist Medical Center
9:30-9:45 AM  
**e-poster 58**  
**A craniometric analysis of the posterior cranial base after posterior vault distraction**  
Presenter: Matthew B. Lorenzo  
Authors: Matthew B. Lorenzo, Netanja ter Maaten, Daniel M. Mazzaferro, Sanjay Naran, Scott P. Bartlett, Jesse A. Taylor  
Institution: The Childrens Hospital of Philadelphia  

9:30-9:45 AM  
**e-poster 59**  
**Contribution of the periosteum mechanical properties in the mandibular distraction osteogenesis**  
Presenter: Kadlub Natacha  
Authors: Debelmas Alexandre, Picard Arnaud, Diner Patrick Antoine, Nedjar Boumediene, Kadlub Natacha, Boisson Jean  
Institution: APHP  

9:30-9:45 AM  
**e-poster 60**  
**Le Fort 3 in Pycnodysostosis: particularities of management in two cases**  
Presenter: Erick Arnaud  
Authors: Erick Arnaud, Hossein Khonsari, Rodrigo Kouji, Sam Haber, Eva Galliani, Arnaud Picard  
Institution: Hospital Necker craniofacial unit  

9:30-9:45 AM  
**e-poster 61**  
**Orthognathic surgery and rhinoplasty: Should they be simultaneous or staged?**  
Presenter: Alexander Sun  
Authors: Alexander Sun, Derek Steinbacher  
Institution: Yale School of Medicine  

9:30-9:45 AM  
**e-poster 62**  
**Facial bipartition under the age of two for severe craniofacial clefting**  
Presenter: Bryant A Toth, M.D.  
Authors: Bryant A Toth, M.D.  
Institution: Ucsf-Benioff Childrens Hospital, Oakland, California  

9:30-9:45 AM  
**e-poster 63**  
**Minimal Invasive Le Fort III Osteotomy**  
Presenter: Herman Jr VERCRUYSSE  
Authors: Herman Jr Vercruyssse, Ramon Sieira-Gil, Alfonso Navarro, Eloy Garcia-Diez  
Institution: Department of Pediatric Surgery, Hospital Sant Joan de Déu, Barcelona, Spain  

9:45-10:00 AM  
**e-poster 64**  
**Results of spring-assisted cranioplasty in patients with scaphocephaly**.  
Presenter: Leonid Satanin  
Authors: Leonid Satanin, Ivan Teterin, Andrey Evtuev, Alexander Ivanov, Alexander Sakharov, Vitaly Roginsky, Natalia Lemeneva  
Institution: Moscow Burdenko Neurosurgery Institute, Russia
9:45-10:00 AM  e-poster 65
Computer 2  Vertebral anomalies in craniofacial microsomia: systematic review and large multicenter cohort study
Presenter: Maarten Koudstaal
Authors: Maarten Koudstaal, Ruben Renkema, Linda Caron, David Dunaway, Chris Forrest, Bonnie Padwa
Institution: Erasmus MC

9:45-10:00 AM  e-poster 66
Computer 3  Comparison of Cognitive Developmental Outcomes in Late Presentation Metopic Craniosynostosis Repair
Presenter: Stefani C Fontana
Authors: Stefani C Fontana, Skylar Bellinger, Debora B Daniels, Paul J Camarata, Brian T Andrews
Institution: University of Kansas Medical Center, Department of Plastic Surgery

9:45-10:00 AM  e-poster 67
Computer 4  Role of computed tomography before and after nonsyndromic craniosynostosis surgery: a systematic review.
Presenter: Nayif Alnaif
Authors: Nayif Alnaif, Alamri, Abdulrahman, Zhou, Mingsha, Galli, Rafeal, Gilardino, Mirko
Institution: McGill University

9:45-10:00 AM  e-poster 68
Computer 5  Craniometaphyseal Dysplasia
Presenter: Tatiana Palomino Consuegra
Authors: Tatiana Palomino Consuegra, Rolando Prada Madrid, Diana Marcela Diaz López, Diana Carolina Gómez Prada
Institution: Hospital Infantil Universitario de San José, Bogotá, Colombia

9:45-10:00 AM  e-poster 69
Computer 6  Changes in Skull Dysmorphology with Age in Unilateral Coronal Synostosis
Presenter: Kirun Baweja, BS
Authors: Kirun Baweja, BS, Alexander H. Sun, BS, Rajendra Sawh-Martinez, MD, John A. Persing, MD
Institution: Yale School of Medicine

9:45-10:00 AM  e-poster 70
Computer 7  The changing indication for correction of metopic synostosis: the Rotterdam experience.
Presenter: Hansje Bredero-Boelhouwer
Authors: Martijn Cornelissen, Hansje Bredero-Boelhouwer, Irene Mathijsen, Sarah Versnel
Institution: Erasmus University Medical Center, Rotterdam, the Netherlands

9:45-10:00 AM  e-poster 71
Computer 8  Engineering novel hydrogel adhesives for cranioplasty procedures
Presenter: John G Meara
Authors: Ehsan Shirzaei Sani, Ehsan Shirzaei Sani, Seyed Hossein Bassir, Roberto Portillo Lara, John G Meara, Giuseppe Intini, Nasim Annabi
Institution: Harvard School of Dental Medicine
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<tr>
<th>Time</th>
<th>E-Poster</th>
<th>Title</th>
<th>Presenter</th>
<th>Authors</th>
<th>Institution</th>
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<td>9:45-10:00 AM</td>
<td>e-poster 72</td>
<td>Progress in automated intracranial volume quantification from 3D Photography</td>
<td>Antonio R. Porras</td>
<td>Liyun Tu, Antonio R. Porras, Deki Tsering, Robert Keating, Albert Oh, Marius George Linguraru, Scott R. Ensel, Beatriz Paniagua, Andinet Enquobahire, Gary F. Rogers</td>
<td>The Sheikh Zayed Institute for Pediatric Surgical Innovation, Childrens National</td>
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<td>9:45-10:00 AM</td>
<td>e-poster 73</td>
<td>Computer Simulations for Prediction of Sagittal Spring Cranioplasty</td>
<td>Alessandro Borghi</td>
<td>Alessandro Borghi, Naiara Rodriguez Florez, Gregory James, Silvia Schievano, David Dunaway, Owase Jeelani</td>
<td>UCL GOS Institute of Child Health and Great Ormond Street Hospital</td>
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<tr>
<td>9:45-10:00 AM</td>
<td>e-poster 74</td>
<td>Understanding Patients Perspectives of Barriers to Accessing Care</td>
<td>Meghan McCullough, MD</td>
<td>Meghan McCullough, MD, Allyn Ausländer, MPH, Caroline Yao, MS, MD, Jordan Swanson, MD, William P Magee III, DDS, MD</td>
<td>University of Southern California</td>
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<tr>
<td>9:45-10:00 AM</td>
<td>e-poster 75</td>
<td>The International Family Study: A Global Collaboration Advancing Genetic and Epidemiological Research</td>
<td>Allyn Ausländer, MPH</td>
<td>Allyn Ausländer, MPH, Freddy Brindopke, Stephanie Ly, MPH, Pedro Sanchez, MD, Jane Figueiredo, MD, William P. Magee III, DDS, MD</td>
<td>University of Southern California</td>
</tr>
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</table>
10:00-10:15 AM   e-poster 76  
**Evaluation of Bilateral Cleft Lip Patients Using Anthropometry in a Multicultural Setting**  
Presenter: William P Magee III, DDS, MD  
Authors: William P Magee III, DDS, MD, Michelle Carriere, MD, Caroline Yao, MS, MD, Meghan McCullough, MD, Allyn Ausländer, MPH  
Institution: University of Southern California

10:00-10:15 AM   e-poster 77  
**Refinements in secondary cleft lip and nose reconstruction: the simultaneous use of multiple grafts efficiently restores normal anatomical features reducing the reoperation rate**  
Presenter: Francesco Gargano  
Authors: Francesco Gargano, Silvio Podda  
Institution: St Josephs Hospital

10:00-10:15 AM   e-poster 78  
**Limited evidence in the literature for mandibular catch-up growth in Pierre Robin Sequence**  
Presenter: Chad A Purnell  
Authors: Chad A Purnell, Lindsay E Janes, Julian L Klosowiak, Arun K Gosain, Elbert E. Vaca  
Institution: Lurie Childrens Hospital of Northwestern Feinberg School of Medicine

10:00-10:15 AM   e-poster 79  
**Modified Le Fort III Osteotomy - Minimal Incisions**  
Presenter: Hospital Infantil  
Authors: Hospital Infantil, Jose Rolando Prada Madrid  
Institution: Hospital Infantil Universitario de San Jose

10:00-10:15 AM   e-poster 80  
**Analysis of Acute Adverse Postoperative Outcomes after Craniosynostosis Surgery: Identifying Predictors of ICU care**  
Presenter: Jonathan Lee  
Authors: Jonathan Lee, Shirley M Dong, Jonathan Y Lee, Mandeep Tamber, Joseph E Losee, Jesse A Goldstein  
Institution: University of Pittsburgh Medical Center

10:00-10:15 AM   e-poster 81  
**Optic Nerve Sheath Diameter measured by MR imaging and Computed Tomography in Craniosynostosis**  
Presenter: Mostafa Haredy  
Authors: Mostafa Haredy, Giulio Zuccoli, Mandeep Tamber, Ken Kanwal Nischal, Jesse Goldstein  
Institution: Children Hospital of Pittsburgh

10:00-10:15 AM   e-poster 82  
**Outcomes in Craniofacial Surgery - Making the intangible quantifiable and comparable**  
Presenter: Justine O’Hara  
Authors: Justine O’Hara, Monteregge, S, Chua, D, Rooney, N, Dunaway, D  
Institution: Great Ormond Street Hospital for Sick Children
10:00-10:15 AM  e-poster 83  
**Aesthetic Refinements in Patients with Hemi-facial Asymmetry**
Presenter: Juan Martin Chavanne  
Authors: Juan Martin Chavanne, Diego Steinberg, Cristian Schauvinhold  
Institution: WCF Bs.As Craniofacial Center Austral University Hospital

10:00-10:15 AM  e-poster 84  
**Platelet Rich Plasma Enhance the Angiogenesis of Adipose-Derived Stem Cells in Ischemic Hind Limb Model**
Presenter: Chia-Fang, Chen  
Authors: Chia-Fang, Chen, Han-Tsang, Liao  
Institution: Dept of Plastic & 65286; Reconstructive Surgery, Chang Gung Memorial Hospital

10:00-10:15 AM  e-poster 85  
**3D Printed Bioactive Ceramic Scaffold Osteoconduction Across Critical-Sized Mandibular Defects**
Presenter: Christopher D. Lopez  
Authors: Christopher D. Lopez, Lukasz Witek, MSci, PhD, J. Rodrigo Diaz-Siso, MD, Roberto L. Flores, MD, Eduardo D. Rodriguez, MD DDS, Paulo G. Coelho, DDS PhD  
Institution: Icahn School of Medicine at Mount Sinai, New York NY

10:00-10:15 AM  e-poster 86  
**Uncertainties in modelling soft tissue prediction in orthognathic surgery**
Presenter: Paul Knoops  
Authors: Paul Knoops, Alessandro Borghi, Federica Ruggerio, Alberto Bianchi, Silvia Scheckino, David Dunaway  
Institution: UCL GOS Institute of Child Health and Great Ormond Street Hospital for Children

10:00-10:15 AM  e-poster 87  
**Temporoparietal fascial flap for infected temporooccipital cerebrospinal fluid fistulae reconstruction**
Presenter: Enrique Olivares  
Authors: Enrique Olivares, Jorge Bonastre, Carlos Corrales, Beatriz Gonzalez-Meli, Javier Enriquez-de-Salamanca  
Institution: Universidad Europea and Hospital Universitario Nino Jesus

10:00-10:15 AM  e-poster 88  
**Mixed Dentition Cleft/Craniofacial Patients: Incidental Head and Neck Findings on Cone Beam CT**
Presenter: Wendy Chen  
Authors: Giancarlos Santos, Wendy Chen, Joici Job, Joseph E Losee, Barton Branstetter, Lindsay A Schuster  
Institution: Childrens Hospital of Pittsburgh

10:15-10:30 AM  e-poster 89  
**Spring use in Craniofacial Surgery - Indications and Contraindications**
Presenter: Noor Jeelani  
Authors: Noor Jeelani, R Hayward, G James, I Rather, J OHara, J Ong, D Dunaway  
Institution: GOSH UCL
10:15-10:30 AM  
**e-poster 90**  
**Segmental box osteotomy with internal orbital reconstruction for sphenoid wing absence** associated globe malposition  
**Presenter:** Edward H Davidson MA (Cantab) MBBS  
**Authors:** Edward H Davidson MA (Cantab) MBBS, Michael P Grant MD PhD, Anand R Kumar MD  
**Institution:** Montefiore Medical Center/Albert Einstein College of Medicine

10:15-10:30 AM  
**Computer 3**  
**e-poster 91**  
**Virtual Custom Helmet Design for Sagittal Strip Craniectomy**  
**Presenter:** Christopher Derderian  
**Authors:** Christopher Derderian, Pang-Yun Chou, Christopher Warne, Suyue M Zang, Alex A Kane, Rami Hallac  
**Institution:** UT Southwestern Medical Center

10:15-10:30 AM  
**Computer 4**  
**e-poster 92**  
**Analysis of prognostic and risk factors for mortality of facial bone fractures**  
**Presenter:** Pofang Wang  
**Authors:** Pofang Wang, Hsin-Yi Wu, Han-Tsung Liao  
**Institution:** Linkou Chang Gung Memorial Hospital

10:15-10:30 AM  
**Computer 5**  
**e-poster 93**  
**Validating Outcome Metrics: Accuracy of the VECTRA H1 Portable 3D Photo System for Facial Imaging Applications**  
**Presenter:** Seth M. Weinberg  
**Authors:** Liliana Camison, Michael R. Bykowski, Wei Wei Lee, Jesse A. Goldstein, Seth M. Weinberg, Joseph E. Losee  
**Institution:** University of Pittsburgh Medical Center

10:15-10:30 AM  
**Computer 6**  
**e-poster 94**  
**Le Fort 1 Distraction Osteogenesis in Cleft Patients Using an Adaptable Device and Virtual Planning**  
**Presenter:** Sean M. Hill, MD  
**Authors:** Sarah A. Frommer, MD/PhD, Raymond J Harshbarger, MD, Patrick K. Kelley, MD, Adriana C. Da Silveira, DDS, MS, PhD, Sean M. Hill, MD  
**Institution:** Dell Childrens Medical Center

10:15-10:30 AM  
**Computer 7**  
**e-poster 95**  
**To Admit or Not to Admit - That is the Cleft Lip Question**  
**Presenter:** Artur Fahradyan  
**Authors:** Artur Fahradyan, Izabela Galdyn, MD, Beina Azadgoli, BS, Mark M. Urata, MD, DDS, Stacey H. Francis,MD  
**Institution:** Childrens Hospital Los Angeles

10:15-10:30 AM  
**Computer 8**  
**e-poster 96**  
**Ruptured Internal Maxillary Artery Pseudoaneurysm Following Le Fort I Osteotomy: Case Report, Systematic Literature Review, and Evidence-Based Guidelines**  
**Presenter:** Catey Garland  
**Authors:** Michael Bykowski, Amber Hill, William Tobler, Catey Garland, Joseph E Losee, Jesse A Goldstein  
**Institution:** Childrens Hospital of Pittsburgh
10:15-10:30 AM  e-poster 97
Computer 9  
**A Single Lab Test to Aid Pierre Robin Sequence Severity Diagnosis**
Presenter: Artur Fahradyan  
Authors: Artur Fahradyan, Beina Azadgoli, BS, Mark M. Urata, MD, DDS, Stacey H. Francis, MD  
Institution: Childrens Hospital Los Angeles

10:15-10:30 AM  e-poster 98
Computer 10  
**Differences in Infraorbital Foramen Position in Unilateral Cleft Lip and Palate**
Presenter: Shikhar Tomur  
Authors: Shikhar Tomur, Alison Kaye  
Institution: University of Missouri-Kansas City School of Medicine

10:15-10:30 AM  e-poster 99
Computer 11  
**Spring-assisted cranioplasty for sagittal craniosynostosis: a subtype analysis**
Presenter: Jungwon Genevieve Park  
Authors: Christopher Runyan, Jungwon Genevieve Park, Christopher Michael Runyan, Kyle Gabrick, Edreca Allison Thompson, Daniel Couture, Lisa Renee David  
Institution: Wake Forest

10:15-10:30 AM  e-poster 125
Computer 12  
**An Analysis of 53 Craniofacial Center Websites: Craniosynostosis Families are Being Given Inaccurate, Vague, and Inconsistent Information**
Presenter: Jeffrey Goldstein  
Authors: Jeffrey A. Goldstein MD, Luke Boone MD, Vivian Buchanan PA-C, Michael Lypka DMD/MD, Amanda Johnson APRN  
Institution: Childrens’ Mercy Hospital Kansas City, Univ. of Missouri-KC

4:00-4:15 PM  e-poster 100
Computer 1  
**Craniofacial Surgical Planning with Augmentation Reality: Accuracy of Linear 3D Cephalometric Measurements on 3D Holograms**
Presenter: Kihyun Cho, MD, MSc  
Authors: Kihyun Cho, MD, MSc, Jeff Yanof, PhD, Graham S Schwarz, MD, FACS, Karl West, MS, Jennifer McBride, PhD, Francis A. Papay, MD  
Institution: Plastic Surgery, Cleveland Clinic, Cleveland, Ohio, USA

4:00-4:15 PM  e-poster 101
Computer 2  
**Strategies for Immediate Reconstruction of Disfiguring High-flow Vascular Malformations of the Lips**
Presenter: Dov Charles Goldenberg  
Authors: Dov Charles Goldenberg, Esther Choi, Vania Kharmandayan, Tatiana Moura, Rolf Geperli  
Institution: Division of Plastic Surgery - Hospital das Clinicas, University of Sao Paulo Medical

4:00-4:15 PM  e-poster 102
Computer 3  
**Median and oblique facial clefts: a series of 13 cases**
Presenter: Takanori Miyajima  
Authors: Takanori Miyajima, Takayuki Okumoto, Yoshikazu Inoue  
Institution: Fujita Health University
4:00-4:15 PM  
**e-poster 103** 
**Computer 4**  
**Image Guided Navigation in Craniofacial Surgery: A Systematic Review and Grading of the Literature**  
Presenter: Brad Gandolfi  
Authors: Brad Gandolfi, Meaghan L Barr, Michael R DeLong, MD, Neha Datta, MD, Thomas D Willson, MD, Reza Jarrahy, MD  
Institution: UCLA Division of Craniofacial Surgery  

4:00-4:15 PM  
**e-poster 104** 
**Computer 5**  
**Peptide Amphiphile Nanofibers with BMP-2 Promote Bone Regeneration with Attenuated Inflammation**  
Presenter: Reena Bakshi  
Authors: Reena Bakshi, Akishige Hokugo, Mark McClendon, Samuel Stupp, Reza Jarrahy  
Institution: University of California, Los Angeles  

4:00-4:15 PM  
**e-poster 105**  
**Computer 6**  
**The Importance of Using a Comprehensive Multidisciplinary Cleft Registry to Record a Complete and Detail Patient Characteristics**  
Presenter: Gadia Ayundya  
Authors: Prasetyanugraheni Kreshanti, Gadia Ayundya  
Institution: Plastic Surgery Div, Cleft Craniofacial Center, Cipto Mangunkusumo Hospital  

4:00-4:15 PM  
**e-poster 106**  
**Computer 7**  
**Posterior Cranial Distraction Osteogenesis Including the Foramen Magnum: A Comparative Analysis**  
Presenter: Sean M. Hill, MD  
Authors: Sarah Frommer, Raymond J Harshbarger, MD, Sean M. Hill, MD, Patrick K. Kelley, MD, Timothy M., George, MD  
Institution: Dell Childrens Medical Center  

4:00-4:15 PM  
**e-poster 107**  
**Computer 8**  
**Safety Outcomes after Endoscopic versus Open Repair of Metopic Craniosynostosis**  
Presenter: Laura A. Monson, MD  
Authors: Tara L. Braun, BS, Bradley S. Eisemann, MD, Shola Olorunnipa, MD, Edward P. Buchanan, MD, David Y. Khechoyan, MD, Robert C. Dauser, MD, Sandi K. Lam, MD, Laura A. Monson, MD  
Institution: Baylor College of Medicine  

4:00-4:15 PM  
**e-poster 108**  
**Computer 9**  
**Outcomes in Furlow Palatoplasty for Secondary Speech Surgery**  
Presenter: Laura A. Monson, MD  
Authors: Tara L. Braun, BS, Edward P. Buchanan, MD, David Y. Khechoyan, MD, Kristina D. Wilson, PhD, SLP, Ellen E. Moore, MA, SLP, Cristina Hernandez, RN, Laura A. Monson, MD  
Institution: Baylor College of Medicine
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<td>Impaired EEG-SEP finding in the affected hemisphere in patients with posterior plagiocephaly</td>
<td>Maiju Härmä</td>
<td>Maiju Härmä, Leena Lauronen, Junnu Leikola, Jyri Hukki, Anne Saarikko</td>
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<td>Derek Steinbacher</td>
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<td>Dipyridamole-Coated 3D-Printed Bioactive Ceramic Scaffolds Regenerate Alveolar Cleft Defects: A Pilot Study</td>
<td>Christopher D. Lopez BA</td>
<td>Christopher D. Lopez BA, Jonathan M. Bekisz BA, Lukasz Witek, MSci PhD, Roberto L. Flores MD, Andrea Torroni MD PhD, Paulo G. Coelho DDS PhD</td>
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<td>Long Term follow-up of the Surgical Hypercorrection Technique for Trigonocephaly</td>
<td>Katelyn Bennett</td>
<td>Katelyn Bennett, Fan Liang, Kavitha Ranganathan, Karin Murasko, Christian Vercler, Steven Buchman</td>
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<td>Median Cleft Lip - Surgical Management Protocol Based on 18 Operated Cases</td>
<td>Jorge Morán</td>
<td>Marcus Collares, Jorge Morán, Mariana M Fraga, Ciro P Portinho, João Maximiliano Martins, Jorge Hoyos</td>
<td>University of Rio Grande do Sul - Brazil</td>
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E-Posters
Friday, October 27th, 2017
Foyer Grand Coral Ballroom

4:15-4:30 PM  e-poster 116
Computer 4  Scaphocephaly Part III: Cranial Perimeter and Intracranial Hypertension in Sagittal Synostosis with and without Secondary Coronal Synostosis
Presenter: Joseph Michienzi
Authors: Joseph Michienzi, Eric Arnaud, Federico Di Rocco, Dominique Renier, Daniel Marchac, Alexandre Marchac
Institution: Hopital Necker-Enfants Malades Paris, France

4:15-4:30 PM  e-poster 117
Computer 5  Diagnosis And Early Intervention Of Velofaring Insufficiency After Primary Palatoplasty In Patients Interdisciplinary Treated In Fisulab (Rehabilitation Center for children with cleft lip and palate, Bogotá Colombia).
Presenter: Diana Marcela Diaz Lopez
Authors: Diana Marcela Diaz Lopez, Rolando Prada, Juan Carlos Zambrano, Pilar Echeverry
Institution: Fundación Universitaria De Ciencias De La Salud

4:15-4:30 PM  e-poster 118
Computer 6  Approaching Transfusion Free Surgery for Posterior Vault Reconstruction for Sagittal Synostosis
Presenter: Jane Kugler
Authors: Jane Kugler, Amy Beethe, MD, Jason Miller, MD, Rachel Spitznagel, MD
Institution: Children’s Hospital and Medical Center, and the University of Nebraska Medical

4:15-4:30 PM  e-poster 119
Computer 7  Distraction-induced TMJ Ankylosis: Comprehensive Management
Presenter: Kevin Xiao
Authors: Michael Lypka, Kevin Xiao
Institution: Children’s Mercy Hospital

4:15-4:30 PM  e-poster 120
Computer 8  Obstructive Sleep Apnea Treatment: Structural expansion of the upper airway.
Presenter: Romulo Guerrero
Authors: Romulo Guerrero, Adriana Guerrero
Institution: Hospital Metropolitano de Quito

4:15-4:30 PM  e-poster 121
Computer 9  Refined Concepts to Improve Aesthetic Outcomes in Microtia Ear Reconstruction: Personal experiences based on 100 cases
Presenter: Akihiko Oyama Md, Phd
Authors: Akihiko Oyama Md, Phd, Emi Funayama Md, Phd, Yuhei Yamamoto MD,PhD
Institution: Faculty of Medicine, Hokkaido University

4:15-4:30 PM  e-poster 122
Computer 10  Factors Associated with Unplanned Re-Operation in Pediatric Plastic Surgery
Presenter: Dra. Renata Maricevich
Authors: Kevin T Jubbal, Dmitry Zavlin, Edward P Buchanan, Larry H Hollier, Jr Dra. Renata Maricevich
Institution: Loma Linda University
4:15-4:30 PM  e-poster 123
Computer 11  A 42 year experience with autogenous cranioplasty.
Presenter:  S Anthony Wolfe
Authors:  S Anthony Wolfe
Institution:  Chief, Division of Plastic Surgery Miami Children’s Health System

4:15-4:30 PM  e-poster 124
Computer 12  Ex nihilo aliquid fit: Something is made where there is nothing
Presenter:  S Anthony Wolfe
Authors:  S Anthony Wolfe
Institution:  Chief, Division of Plastic Surgery Miami Children’s Health System
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