ACADEMY OF APPLIED MYOFUNCTIONAL SCIENCES

FIFTH CONGRESS AND A CALL FOR THE FORMATION OF AN INTERNATIONAL PEDIATRIC ORTHODONTIC SOCIETY

MYOFUNCTIONAL ORTHODONTIC INTERVENTION
AT THE EARLIEST AGE POSSIBLE TO HELP THE MOST AMOUNT OF PEOPLE

A VIRTUAL CONGRESS REIMAGINED

AAMS-FIFTH
CONGRESS
AUGUST 1-30, 2020
VIRTUAL
REIMAGINED
AAMSINFO.ORG

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BERGYRON Patrice | SWITZERLAND

BERRETIN Felix Giedre | BRAZIL

BIANCHINI Esther | BRAZIL

BOTZER Eyal | ISRAEL

BOYD Kevin | USA

BURGET Frankie | USA

CAMACHO Macario | USA

CANNON Mark | USA

CASTRO CORREA Camilla | BRAZIL

CATTONI Debora | BRAZIL

COLQUITT Tom | USA

COURTNEY Rosalba | AUSTRALIA

CRUZ Mark | USA

DAYAN Sharona | USA

DEL GOBBO Wanda | ITALY

DE FELICIO Claudia | BRAZIL

DE LUCCAS Gabriele | BRAZIL

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GELB Michael | USA

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GUZMAN Luis Ruiz | SPAIN

HANG Bill | USA

HERMANN Gabor | HUNGARY

HIDEHIRO Abe | JAPAN

HRUBOS-STROM Harald | NORWAY

HRUSKA Ron | USA

IMAMURA Miho | JAPAN

JAMES Gavin | USA

JOHNSON Virginia | USA

KHATWA Umakanth | USA

KOTLOW Larry | USA

KRYGER Meir | USA

LACROIX Michael | FRANCE

LALAUZE Roselyne | FRANCE

LEE Justin | SOUTH KOREA

LEVRINI Luca | ITALY

LUEDEMAN Amy | USA

LUSTIG Robert | USA

MACHOS Marzena Jadwiga | POLAND

MAHONY Derek | AUSTRALIA

MANENTI Rebecca Jewel | ITALY

MARCHESAN Irene | BRAZIL

MARZO Giuseppe | ITALY

McINTOSH David | AUSTRALIA

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O'CONNOR Tony | IRELAND

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ONO Takashi | JAPAN

PAGNONI Stefano | ITALY

PASKAY Licia | USA

PETERSON Cynthia | USA

PIA VILLA Maria | ITALY

PIRELLI Paola | ITALY

QUINZI Vincenzo | ITALY

QUO Stacey | USA

RAMIREZ German | CANADA

RAPHAEL Barry | USA

RIVERA Eliana | COLOMBIA

ROBBINS Hila | USA

ROBLEE Rick | USA

ROGERS Katrina | UK

SACCOMANO Sabina | ITALY

SANTOS Marisa | ARGENTINA

SATOH Mako Makoto | JAPAN

SEMONICK Christina | USA

SPRUYT Karen | BELGIUM

STECCO Antonio | ITALY

SULLIVAN Shannon | USA

THELLIEZ Emmanuel | FRANCE

THERRY Corinne | FRANCE

THORP-HOLMSEN Solveig | NORWAY

VILLANUEVA Pia | CHILE

WARNIER Morgane | BELGIUM

WEBER Silke Anna Theresa | BRAZIL

WEISMANN Gina | ISRAEL

WENG CHEU Yue | SINGAPORE

ZAGHI Soroush | USA

ZEE Phyllis C | USA

AIM OF THE TRACKS

Putting up the science for each track - current evidence.

Conference structure around gathering information and international collaboration to inform ideas for the formulation of internationally agreed position statements.

To present the dynamism of the AAMS and the roles of all of the professional memberships represented in the group coming together and to complement each other's work to meet the needs of patients so that patients are well supported and their quality of life can be improved. This will have far reaching benefits to the health of the nation.

The work of the conference to feed into projects such as the *First 1000 Days*; FDI Vision 2020; Public Health Agendas Nationally and Internationally.

TRACK 1

PEDIATRIC ORTHODONTIC INTERVENTION AT THE EARLIEST AGE POSSIBLE: A CALL FOR AN INTERNATIONAL PEDIATRIC ORTHODONTIC SOCIETY (IPOS)

TRACK 2

THE 1ST 1000 DAYS OF LIFE: A CALL TO RADICALLY REIMAGINE PREVENTION, SCREENING, & CARE WITH MYOFUNCTIONAL PRINCIPLES

TRACK 3

OROFACIAL MYOFUNCTIONAL THERAPY & ORTHODONTICS

TRACK 4

BREATHING: FUNCTION & DYSFUNCTION

TRACK 5

FRENULUM INSPECTION, SURGERY, & REHABILITATION ACROSS THE LIFESPAN

TRACK 6

CRANIOFACIAL MORPHOLOGY & THE PHYSICAL BODY

TRACK 7

SLEEP & MYOFUNCTIONAL THERAPY

TRACK 8

NUTRITION, CHEWING, & SYSTEMIC HEALTH

TRACK 9

THE MULTIDISCIPLINARY TEAM, OMT, & CLINICAL CARE

TRACK 10

VIRTUAL EXHIBIT HALL

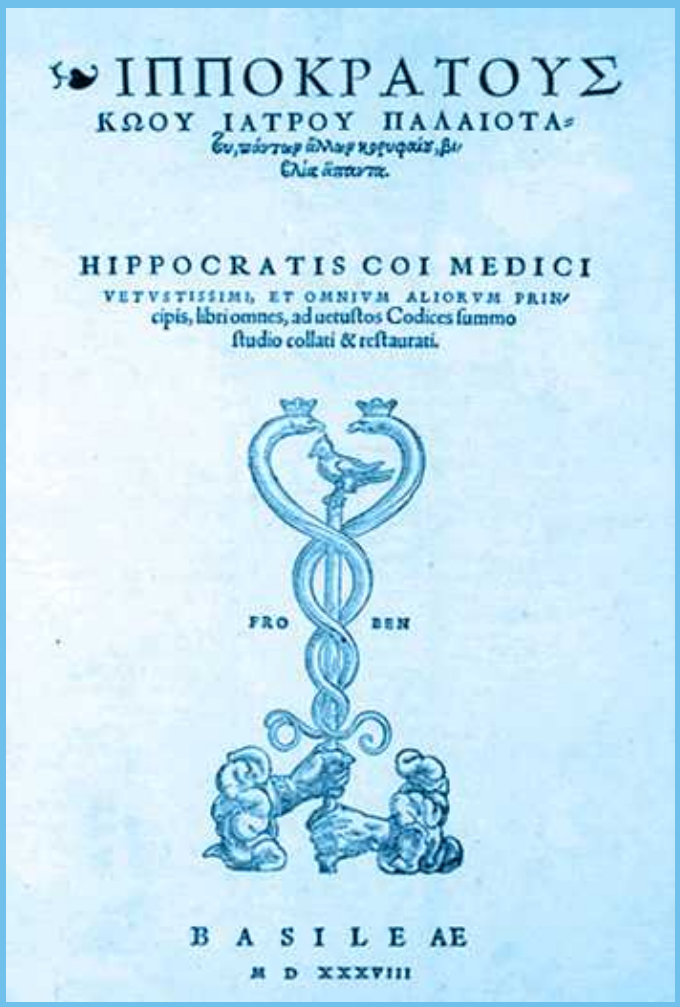
5th AAMS Hippocrates Gala

Saturday August 22

09:00 PDT Los Angeles, 17:00 London

AN EMERGING FIELD OF MEDICINE NEEDS TO TELL ITS STORIES, CELEBRATE ITS HEROES, AND LET THEIR LIGHT SHINE UPON US ALL

JOIN US AS WE CELEBRATE GIANTS LEADING THE WAY FORWARD AND RISING STARS WHO WILL CHANGE MEDICINE AS WE KNOW IT! CELEBRATE THE PROFOUND IMPACTS OF TAKASHI ONO, JAPAN, PAOLA PIRELLI, ITALY, JOHN MEW, UNITED KINGDOM, JEAN DELAIRE, FRANCE, STACEY QUO, USA, DARICK NORDSTROM, USA, EYAL BOTZER, ISRAEL, PATRICK MCKEOWN, IRELAND, MACARIO CAMACHO, USA, GIEDREBERRETIN-FELIX, BRAZIL, KEVIN BOYD, USA, AND RISING STARS KAREN SPRUYT, FRANCE, AND MANY OTHERS!



Join us as we change medicine!

KEYNOTE SPEAKER

AUGUST 1, 2020

09:00 AM PDT (LOS ANGELES TIME)

Meir Kryger, MD, FRCP(C) | USA

YALE SCHOOL OF MEDICINE AND THE VA CONNECTICUT HEALTH SYSTEM

Meir Kryger, MD, FRCPC, joined the Yale School of Medicine and the VA Connecticut Health System, November 2011. Previously he was Professor of Medicine, University of Manitoba where he established the first clinical laboratory studying patients with sleep breathing problems in Canada. Dr. Kryger has published more than 200 research articles and book chapters. He is the chief editor of the most widely used textbook in sleep medicine, The Principles and Practice of Sleep Medicine, currently in its 5th edition and is the author of A Woman's Guide to Sleep Disorders, the Atlas of Clinical Sleep Medicine, and Kryger's Sleep Medicine Review. Dr. Kryger was the first to diagnose and report obstructive sleep apnea in North America. His research was the first to show the feasibility of using noninvasive techniques to ventilate post-polio patients in their homes. His laboratory elucidated the interaction between heart failure and sleep respiration publishing the first systematic study of oxygen in this condition. He has been president of both the Canadian Sleep Society and the American Academy of Sleep Medicine. He is on the Board of Directors of the National Sleep Foundation in Washington, D.C., and served as Board. He received the William C. Dement Award for Academic Achievement in sleep medicine. In 2011 he received a Distinguished Scientist Award from the Canadian Sleep Society at the meeting of the World Association of Sleep Medicine. Kryger graduated from the McGill University Medical School, interned at Michael Reese Hospital in Chicago and completed internal medicine training at the Royal Victoria Hospital in Montreal. His pulmonary fellowship was at the University of Colorado, followed by two years of research training. He is boarded in Internal Medicine, Pulmonary Medicine and Sleep Medicine and is a Fellow of the Royal College of Physicians of Canada.

FROM THE NEEDLES OF DIONYSUS: THE STATUS OF MYOFUNCTIONAL THERAPY'S DEVELOPMENT AS A FIELD OF MEDICINE, THROUGH THE PRISM OF SLEEP MEDICINE, AND CALLS FOR WHAT IS NEEDED FOR IT TO CONTINUE TO ADVANCE TO GET THERE

ABSTRACT

Although features of sleep breathing disorders were first described in antiquity, it wasn't until the 1970's that medical science started to understand their pathophysiology and it wasn't until the early 1990's that it became clear that such disorders were very common.[1-3] Many researchers realized that sleep apnea was not a solitary disease but the final common pathway of many conditions that affected the upper airway's anatomy or function, or as a result in abnormalities of control of breathing.

The first specific treatment for obstructive sleep apnea (the most common form) described in the medical literature was tracheostomy. The first non-invasive treatment, continuous positive airway pressure was described in 1981 but it took several years for this therapy to be commercially available and studied.[4] Because of often suboptimal treatment adherence and efficacy of CPAP and realization that sleep apnea had many causes other treatments were introduced. For example, dental appliances started to be used in the late 1980's.[5]

Other therapies that attempted to modify upper airway anatomy (e.g. surgical, rapid maxillary expansion) emerged, but what became clear with time was that there wasn't one treatment that was going to be able to treat all forms of sleep apnea in all age groups. The notion that abnormal upper airway function could lead to boney changes of upper airway structures which in turn could worsen even further upper airway function. Thus, dysfunction could lead to dysmorphism.[6] This lead to the hypothesis that improving function of the muscles of upper airway (for example, with exercises) might play a role in the treatment of sleep apnea in selected children and adults.[7] Emerging literature suggests that myofunctional therapy can improve the function of the upper airway muscles and be effective in selected patients.[6,8,9] Research will ultimately teach us what patients will benefit from which treatment. We are entering the era of personalized treatment of sleep apnea.[10]

LEARNING OUTCOMES

1) To outline the journey of sleep medicine and its evolution as a field of medicine.

2) To recognise that a new field of medicine requires clinical reports, physiological research, development of therapeutics, clinical trials, a body of practitioners, and textbooks.

3) To discuss the concept of Myofunctional therapy as a rapidly developing field of medicine.

1. Kryger MH. Sleep apnea. From the needles of Dionysius to continuous positive airway pressure. Arch Intern Med. 1983;143(12):2301-2303.
2. Kryger M, Quesney LF, Holder D, Gloor P, MacLeod P. The sleep deprivation syndrome of the obese patient. A problem of periodic nocturnal upper airway obstruction. Am J Med. 1974;56(4):530-539.
3. Young T, Palta M, Dempsey J, Skatrud J, Weber S, Badr S. The occurrence of sleep-disordered breathing among middle-aged adults. N Engl J Med. 1993;328(17):1230-1235.
4.Sullivan CE, Issa FG, Berthon-Jones M, Eves L. Reversal of obstructive sleep apnoea by continuous positive airway pressure applied through the nares. Lancet. 1981;1(8225):862-865.
5. Clark GT, Nakano M. Dental appliances for the treatment of obstructive sleep apnea. J Am Dent Assoc. 1989;118(5):611-615, 617-619.
6. Huang YS, Guilleminault C. Pediatric Obstructive Sleep Apnea: Where Do We Stand? Adv Otorhinolaryngol. 2017;80:136-144.
7. Coceani L. Oral structures and sleep disorders: a literature review. Int J Orofacial Myology. 2003;29:15-28.
8. Camacho M, Certal V, Abdullatif J, et al. Myofunctional Therapy to Treat Obstructive Sleep Apnea: A Systematic Review and Meta-analysis. Sleep. 2015;38(5):669-675.
9. Hsu B, Emperumal CP, Grbach VX, Padilla M, Enciso R. Effects of respiratory muscle therapy on obstructive sleep apnea: a systematic review and meta-analysis. J Clin Sleep Med. 2020;16(5):785-801.
10. Carberry JC, Amatoury J, Eckert DJ. Personalized Management Approach for OSA. Chest. 2017.

KEYNOTE SPEAKER

AUGUST 1, 2020
18:00 PDT (LOS ANGELES TIME)

AUGUST 2, 2020
10:00AM (TOKYO TIME)

Takashi Ono, DDS, PhD | JAPAN

TOKYO MEDICAL AND DENTAL UNIVERSITY | TMDU · ORTHODONTIC SCIENCE

Takashi Ono is Professor and Chairman of the Department of Orthodontic Science, Graduate School Tokyo Medical and Dental University (TMDU), Tokyo, Japan, and Associate Dean of TMDU Dental Hospital. He studied at the University of British Columbia, Canada and the University of Copenhagen, Denmark. Prof. Ono worked and has been working as an Adjunct/Visiting Professor at 6 domestic and 5 international universities. He also serves as an editorial board member for 9 international peer-reviewed journals. He has published 10 book chapters and more than 250 scientific articles and has been invited extensively for lecturing nationally and internationally. In 2018, He received IADR/AADR Williams J. Gies Award. He is currently a member of the Executive Committee of the World Federation of Orthodontists (WFO) and has been appointed as Chairman of the 9th International Orthodontic Congress (IOC) in 2020.

ORAL BREATHING OR NASAL BREATHING? - IMPLICATIONS OF EARLY TREATMENT OF RESPIRATORY DYSFUNCTION

ABSTRACT

Do you think the tongue is a masticatory/speech organ? In fact, the tongue is not only involved in mastication and speech, but also in respiration. This lecture begins with personal research background in tongue physiology and respiratory dysfunction. Then, the topic moves onto respiratory disturbances and consequences in kids, especially about pediatric obstructive sleep apnea, in which intermittent hypoxia (IH) plays a role. Findings from a series of studies related to the effects of IH on the craniofacial growth and function will be discussed.

LEARNING OUTCOMES

1) To understand the tongue is a respiratory organ

2) To realize early treatment of respiratory dysfunction is important

3) To extend the basic research-based evidences to application in myofunctional therapy

JOINT KEYNOTE SPEAKERS

AUGUST 8, 2020 09:00-11:00 PDT (LOS ANGELES)

BABYFACE & BEYOND

GROUNDBREAKING RESEARCH PRESENTING POSSIBLE GAME CHANGING TREATMENT FOR SLEEP MEDICINE, AND IMMEDIATE HELP NOW FOR ALL CLINICIANS' PATIENTS.

Kevin Boyd, DDS, MSc | USA

BOARD CERTIFIED PEDIATRIC DENTIST IN CHICAGO, IL

Board certified Pediatric Dentist in Chicago who also holds a Master's degree in Human Nutrition and Dietetics. He teaches in the Pediatric Dentistry residency program at Lurie Children's Hospital and serves as a dental consultant to their sleep medicine clinic. Dr. Boyd is a visiting scholar at the University of Pennsylvania Museum of Archeology and Anthropology conducting research in post-industrial evolution of the human face and airway-related structures. He lectures worldwide on pediatric OSA, evolutionary oral medicine and early intervention orthodontics.

EARLY DETERMINANTS OF LIFELONG AIRWAY HEALTH DURING THE 1ST 1000 DAYS OF LIFE

ABSTRACT

Malocclusion (poorly aligned teeth, jaws and faces) did not afflict anatomically modern humans *(Homo sapiens sapiens)* for nearly the entire course of their 250,000(+/-) year evolutionary history and only began to appreciably appear near the beginning of the Industrial Revolution in the late 18th/early 19-Centuries in England, Western Europe and North America. Current prevalence estimations indicate that nearly 75% of children, ages 6 to 11 and 89% of youths, ages 12 to 17, now have some degree of malocclusion. Numerous pre-WW II published articles within the corpus of medical and dental literature report on the then common practice of physicians and orthodontists collaboratively intervening upon SRBD and malocclusion co-morbidity, utilizing an orthodontic/ dentofacial orthopedic (O/DO) technique commonly referred to as spreading of the deciduous arches during earliest childhood, sometimes as young as 30 months of age. (Cohen, S., JAMA 1922). This type of O/DO intervention, sometimes done adjunctively with adenoidectomy surgery per pre-treatment diagnosis of adenoid hypertrophy, had been carried out for the primary purpose of improving nasal breathing and quality of life rather than solely for the purpose of correcting so-called 'irregularities of the teeth'. These historically important journal articles had pre-dated the so-called Evidence-Based Medicine Era by several decades, which had been initiated in 1948 with the first ever published report (in the British Medical Journal) of a prospective randomized controlled trial (RCT) concerning the efficacy of a proposed tuberculosis drug called Streptomycin. Ignoring the usefulness of data derived from controlled observational studies (e.g., most pre-WW II literature) based solely upon the fact of not meeting current EBM/RCT standards, seems unwise. Given that the aforementioned maldevelopments of the CFRC are nearly always first detectable in the primary dentition (ages 2.5-6 yrs), most often persistent and worsening beyond without appropriate intervention, and very frequently co-morbidities with pediatric SRBD, it seems a medically-indefensible position to recommend that a child should receive their initial orthodontic evaluation 'no later than age 7'.

LEARNING OUTCOMES

1) To describe specific non-syndromic malocclusion phenotypes as maldevelopments of the intimately connected craniofacial and respiratory complexes (CFRC-Figure1) resulting from epigenetic (genomic-environmental interaction) factors commonly associated with cultural industrialization (e.g., modernized nursing, weaning/post-weaning feeding strategies, etc.)

2) To understand the etiology of specific non-syndromic malocclusion phenotypes from both evolutionary (phylogenetic) and pre-/post-natal growth and development (ontogenetic) perspectives

3) To provide a framework within which the definitive diagnosis of specific non-syndromic malocclusion phenotypes can be described as Early Childhood Malocclusion (ECM) when apparent under the age of 71 months (i.e., 6); and, defined as being severe-ECM(s-ECM) when co-morbid with sleep related breathing disorders (SRBD) behavioral traits

LUSTIG Robert, MD | USA

PROFESSOR EMERITUS OF PEDIATRICS, AT THE UNIVERSITY OF CALIFORNIA, SAN FRANCISCO (UCSF)

Dr. Lustig specializes in the field of neuroendocrinology, with an emphasis on the regulation of energy balance by the central nervous system. His research and clinical practice has focused on childhood obesity and diabetes. Dr. Lustig holds a Bachelor's in Science from MIT, a Doctorate in Medicine from Cornell University. Medical College, and a Master's of Studies in Law from U.C. Hastings College of the Law. Dr. Lustig has fostered a global discussion of metabolic health and nutrition, exposing some of the leading myths that underlie the current pandemic of diet-related disease.

THE NUTRITION TRANSITION IN THE 1ST 1000 DAYS OF LIFE

ABSTRACT

Children today get chronic diseases associated with aging — obesity, type 2 diabetes, and fatty liver disease. Clearly food plays a role. They also get two airway diseases — malocclusion and obstructive sleep apnea. Certainly craniofacial morphology plays a role. But what is the relationship between food, metabolic disease, craniofacial morphology, and airway disease?

Two major alterations typify the difference between real food and ultraprocessed food: the addition of sugar, and the removal of fiber. This is not just true of food for older children (e.g. breakfast cereal), this is also true in infant and toddler food. Newborns have a preference for sweet; and added sugar drives increased intake via the brain's reward system. Commerical baby food is chock full of sugar – on purpose – and the industry tries to hide it. This is even true of infant formula. But what the pregnant mother eats is also an issue, as fructose crosses the placenta and induces key enzymes in lipogenesis. Furthermore, the pregnant mother may develop OSA due to her diet, and the resultant hypoxia can adversely affect fetal outcomes. Furthermore, the lack of fiber in baby food is associated with decreased masticatory muscle function, reducing the width of the palatal vault, resulting in malocclusion, and predisposing to OSA and metabolic disease later on in life.

Thus, the craniofacial-respiratory complex is an unappreciated target of the nutrition transition to ultraprocessed food for newborns, infants, and toddlers. The effects of airway and systemic health occur early and result in longstanding health and medical issues, costing trillions of dollars each year, for which Modern Medicine has not found an adequate solution. For the sake of our children, it is time to rethink baby food.

LEARNING OUTCOMES

1) To evaluate the nutrition transition of children's food over the last 40 years, and its relation to the rise of malocclusion, metabolic syndrome, and obstructive sleep apnea

2) To explain the primary role of fructose added to infant and toddler food and mechanisms of these processes

3) To explain the secondary role of lack of fiber in infant and toddler food and mechanisms of these processes

FORUMS: ENGAGE THE PUBLIC

(forums will be live-streamed replayable on AAMS Youtube page, Recorded for replay on demand)

AUGUST 16, 09:00-11:00 PDT *(LA TIME)* 18:00 *(PARIS TIME)*

A CALL TO REIMAGINE THE 1ST 1000 DAYS OF LIFE: THE GREATEST IMPACT AT THE LOWEST THRESHOLD

A lively discussion, open to all congress attendees, including presentations of protocols, urgent priorities, public health concerns, research, & calls for action! *Isabelle Fillozat, Pia Villanueva, Katrina Rogers, Samantha Weaver, Eyal Botzer, Karen Spruyt, Kevin Boyd, Hila Robbins. Hidehiro Abe, Michelle Emanuel, Gina Weissman, and Shannon Sullivan.*

AUGUST 21, 09:00-10:30 PDT *(LA TIME)* 18:00 *(PARIS TIME)*

A CALL FOR PEDIATRIC ORTHODONTIC INTERVENTION AT THE EARLIEST AGE POSSIBLE: ARE WE AT A TIPPING POINT?

Join a roster of the world's leaders in pediatrics & orthodontics for a live forum on the need for pediatric orthodontic intervention at the earliest age possible and a call for an International Pediatric Orthodontic Society Patrice Bergeyron, Kevin Boyd, Robert Lustig, Shannon Sullivan, Patrick Fellus, Eyal Botzer, Jade Miller, Barry Raphael, Paola Pirelli and other key leaders from around the world.

AUGUST 23, 09:00-11:00 PDT *(LA TIME)* 18:00 *(PARIS TIME)*

SLEEP MEDICINE: HAS MYOFUNCTIONAL THERAPY ARRIVED? HOW MIGHT IT CHANGE THE FIELD?

A dynamic, live forum with key world leaders in sleep medicine (World Sleep Society incoming President, Phyllis Zee, Meir Kryger, Maria Pia Villa and a roster of pioneers changing medicine; and foremost leaders in myofunctional therapeutic intervention for SDB. Groundbreaking research presenting possible game changing treatment for sleep medicine, and immediate help now for all clinicians' patients.

AUGUST 24, 09:00-11:00 PDT *(LA TIME)* **18:00** *(PARIS TIME)*

BREATH: THE NEW SCIENCE OF A LOST ART

Followed by a breathing re-education workshop with Patrick Mckeown

BREATH, by James Nestor, a runaway best-seller touching our world, happens to be an incredible story. Join more than a dozen AAMS Congress speakers who are profiled in his work for a lively discussion about a possible tipping point in medicine. You will not want to miss this program!

James Nestor, Bill Hang, Ted Belfor, Samantha Weaver, Kevin Boyd, Marianna Evans, Mike Mew, John Mew, Patrick Mckeown, Michael Gelb. Marc Richard Moeller. Stacev Ouo (for Christian Guilleminault)

Beginning Immediately Following BREATH & Breathing Forum

WORKSHOP

AUGUST 24, 2020

11:00-13:00 PDT (LOS ANGELES TIME)

18:00-20:00 *(PARIS TIME)*

McKEOWN Patrick, MA, BBE | IRELAND

CLINICAL DIRECTOR OF THE BUTEYKO CLINIC INTERNATIONAL AND CHAIRMAN OF ITS ADVISORY BOARD

Ireland based international breathing instructor and author Patrick McKeown was educated at Trinity College Dublin. He completed his clinical training in Russia in 2002, accredited by the physician and breathing expert Dr. Konstantin Buteyko. Patrick was a chronic asthmatic for most of his life, experiencing high perceived stress and poor sleep. In 1998, he addressed his breathing pattern disorders leading to a dramatic improvement to his health. Since 2002, he has taught children and adults simple and effective ways to adopt functional breathing patterns. A TEDx speaker, Patrick's work has touched the lives of thousands and more worldwide. His work has been published by leading publishing houses including Harper Collins (UK), William Morrow Press (USA), Red Wheel Weiser (USA), Sperling & Kupfer (Italy), Kanki Publishing Inc. (Japan). Journal publications include the American Journal of Respiratory and Critical Care Medicine and Clinical Otolaryngology. His 2015 book, *The Oxygen Advantage,* which was published in fourteen languages and retains a consistently high review rating on Amazon, combines specially formulated techniques to increase oxygen delivery to the brain, improve sleep, enhance concentration and retain focus under stress.

- HOW TO BREATHE WHILE WEARING A FACE MASK
- THE THREE DIMENSIONS OF BREATHING
- LINKING TO PHENOTYPES OF SLEEP APNEA
- WOMEN'S BREATHING VERSUS A MAN'S: MAJOR IMPLICATIONS FOR PAIN, FATIGUE AND SLEEP IN WOMEN

How to breathe while wearing a mask

If worn correctly, a face mask will prevent large-particle droplets that may contain bacteria, allergens and viruses from reaching the mouth and nose. It is important to understand what is taking place 'behind the mask'. With this information it becomes possible to adjust your breathing, improve blood oxygenation, decrease feelings of panic and begin to feel comfortable and safe when wearing your mask.

Breathing and the phenotypes of sleep apnea

Traditionally, obstructive sleep apnea was primarily regarded as an anatomical issue. It was viewed in terms of pharyngeal critical closing pressure (Pcrit), which is the pressure at which the upper airway collapses. In recent years, three non-anatomical traits have been recognized as contributory factors. These are loop gain, arousal threshold and upper airway recruitment threshold. Pcrit: The anatomy and collapsibility of the upper airway. People with high Pcrit, their airway collapses at a low suction pressure.

Loop Gain: Regularity of breathing. Patients with a high loop gain have an exaggerated response to fluctuations in blood carbon dioxide.

Arousal Threshold: How easily the patient wakes from sleep. According to a 2017 paper published in Science, people who hyperventilate during the day are likely to wake more easily from sleep due to an over-stimulated sympathetic nervous system.

Upper Airway Recruitment Threshold: How well the dilator muscles are able to maintain an open upper airway during sleep. Poor muscle responsiveness to airway narrowing can be worsened by mouth breathing, partly due to failure to harness nasal nitric oxide and partly because of poor muscle tone.

In a 2013 study, scientists reported that 69 percent of OSA sufferers have one or more of these physiological characteristics or phenotypes. It has also been proven that each of the four phenotypes can benefit significantly from the restoration of functional breathing patterns.

An understanding of these different phenotypes is important when it comes to defining treatment protocols. For instance, patients with high loop gain respond unfavorably to anatomical interventions such as mandibular advancement and surgery and benefit much more from non-invasive therapies such as breathing re-education.

WORKSHOP

AUGUST 14, 2020

09:00-13:00 PDT (LOS ANGELES TIME)

18:00-22:00 *(PARIS TIME)*

HRUSKA Ron, MPA, PT | USA

BIOMECHANICAL CONSULTANT, UNIVERSITY OF NEBRASKA- LINCOLN AND FOUNDER OF THE POSTURAL RESTORATION INSTITUTE® (PRI)

Ron Hruska, MPA, PT, has a strong interest in myokinematic and biomechanical influences on postural and peripheral adaptation patterns. His 40 years of clinical experience assists him with direct patient interventions based on specific examination and evaluation data that best reflects neuromechanical stability, trunk symmetry and respiratory balance. He lectures extensively and consults regularly with physicians, physical therapists, optometrists, dentists, and other health care providers across the United States and internationally on patterned postural position and pathology and his approach of restoring symmetrical balance using PRI principles. He is a graduate of the University of Nebraska Medical Center, Division of Physical Therapy. He currently is a member of the American Physical Therapy Association. Ron is the founder of the Postural Restoration Institute®, where he continues to teach around 20 courses each year across the country and internationally. He currently consults at the Hruska Clinic, Restorative Physical Therapy Services and Hohl Orthodontics in Lincoln, Nebraska, and IPA Manhattan in New York City. In addition, Ron serves as a Biomechanical Consultant to the University of Nebraska-Lincoln through the Division of Athletic Medicine.

POSTURAL INTERPLAY BETWEEN THE TONGUE, TEETH AND THROAT — A NOVEL MODEL OF INTERDISCIPLINARY INTEGRATION

ABSTRACT

This discussion will focus on the positional influence of the neck on the head and mouth, based on the relationship and integration between the hyoid/ larynx of the neck, the tongue, and the teeth of the mandible. The function of the mouth is dependent on the neurology and musculature that regulates laryngeal, pharyngeal, and intercisal opening. Opening of these anatomical entrances and exits is regulated by the position of the responsible muscles. Muscles of the throat, tongue and teeth can modify the symmetry, the degree, and the strength of these openings. The attendee will be able to recognize what position to place the neck in, to maximize desirable outcomes of each opening. These considerations should enable the patient or client to 're-equilibrate' and 'calibrate' desirable openings with appropriate interaction between the throat, tongue and teeth.

LEARNING OUTCOMES

1) To outline the muscles associated with laryngeal, pharyngeal and intercisal normal opening and the influence posture or position can have on both these muscles and their accompanying openings.

2) To demonstrate how muscles of the larynx and associated high frequencies, muscles of the tongue and associated lingual or labial directed thrust, and muscles of the mandibular teeth and associated mouth opening can influence each other.

3) To describe the postural positions of the neck and head, and the types of activity that will enhance desirable openings of the larynx, pharynx, and intercisal openings for individuals with respective limitations at one or more of these openings.

WORKSHOP

AUGUST 28, 2020

09:00-13:00 PDT (LOS ANGELES TIME)

18:00-22:00 *(PARIS TIME)*

BERRETIN-FELIX Giedre, SLP | BRAZIL

UNIVERSIDADE DE SÃO PAULO / FACULDADE DE ODONTOLOGIA DE BAURU (USP - FOB)

Ms. Berretin-Felix is a graduate in Speech Language Pathology (Bauru School of Dentistry, University of São Paulo - 1996), with a Master's degree in Oral Physiology (Campinas State University - 1999), Ph.D. in Physiopathology in Clinical Medicine (Paulista State University Júlio de Mesquita Filho - 2005) and post doctorate in Swallowing Disorders (University of Florida - 2010). She is currently a Titular Professor, Department of Speech Therapy and Audiology, Bauru School of Dentistry, University of São Paulo, Editor-in-Chief of CEFAC - Speech, Language, Hearing Sciences and Educational Journal, and productivity researcher fellow by the National Council of Scientific and Technological Development.

OROFACIAL MYOFUNCTIONAL ASSESSMENT - MBGR PROTOCOL

CRITICAL PRACTICAL KNOWLEDGE TO MASTER A MEDICALLY VALIDATED INTAKE FORM

ABSTRACT

The stomatognathic system comprises bone, muscular, articular, nervous, gland, circulatory and lymphatic structures, which are related to the orofacial functions, such as breathing, chewing, swallowing and speech. The orofacial assessment is essential to identify the cause of the disturbances, in order to provide an adequate diagnosis and an appropriate treatment in the orofacial motricity area. Thus, the use of standardized protocols is essential. The MBGR Protocol (the acronym stands for the first letter of the authors' last names: Marchesan, Berretin-Felix, Genaro, Redher) has been developed to be applied to patients from 6 years old and comprehends two instruments: Clinical History and Clinical Exam. Both provide information that must be analyzed together, in a complementary approach. In the Clinical Examination, the evaluator can use scores to classify the gravity of the alteration found, including measurements and analyses of the face, extra and intra oral structures, tonicity, mobility and sensitiveness aspects, as well as breathing, chewing, swallowing and speech. Most of the information must be video recorded to be checked posteriorly, in a very detailed way, by using slow motion function, in order to understand possible compensations and disturbances presented. The MBGR Protocol was translated into English in a master dissertation project and the manual of application is being developed, so as to guide professionals on its use.

LEARNING OUTCOMES

1) Identify normal and altered morphological and functional aspects of the stomatognathic system.

2) Know how to analyze and classify the facial anthropometry, extra- and intra-oral characteristics, as well as tonicity, mobility and sensitiveness.

3) Understand the relationship between morphological and functional (breathing, chewing, swallowing and speech) aspects. (breathing, chewing, swallowing and speech).

TRACK 1

PEDIATRIC ORTHODONTIC INTERVENTION AT THE EARLIEST AGE POSSIBLE: A CALL FOR AN INTERNATIONAL PEDIATRIC ORTHODONTIC SOCIETY (IPOS)

BEN YOUNES-UZAN Carine, DDS, ORTH | FRANCE

EARLY TREATMENT OF MAXILLARY HYPOPLASIA. WHY? HOW?

Dr. Ben Younes-Uzan is an Orthodontist, Doctor in Dental Surgery. Qualified Specialist in Dentofacial Orthopedics. Graduate of the Faculty of Medicine of Brussels. Graduate in Advanced Studies in Pediatric Stomatology. Former Orthodontic Consultation fellow at Robert Debré Pediatric Hospital. Member of the office of S.B.R Paris. Perinatal and Pediatric Osteopathy Training Program in Paris

ABSTRACT

The maxilla has a central place in the face and its lack of development has repercussions for all surrounding structures. Maxillary hypoplasia is an evolutionary condition that worsens over time. Subtle malocclusions can become real facial skeletal deformities in all three planes of space affecting craniofacial form. Dento-facial orthopedics in the young child, allows for the treatment of the occlusion beyond the teeth.

LEARNING OUTCOMES

1) To recognize the levers for maxillary arch development.

2) To identify the role of proprioceptive stimulation in orofacial rehabilitation.

3) To define the use of functional and mechanical appliances working together to improve treatment outcomes.

BERGEYRON Patrice, DDS | SWITZERLAND

WHERE FORM MEETS FUNCTION. APPROACHES TO ORTHODONTIC TREATMENT IN 3-6 YEAR OLD

Dr. Bergeyron is an orthodontist, lecturer and a consultant in orthodontics. He is president of the International Society of Functional Esthetic of Smile in Orthodontics (ISFESO), and the founding President of the French Society of Plastic Orthodontics using Aligners (SFOPA). He is a member of the European Clinical Education Council Invisalign, the A.A.O (American Association of Orthodontics), the W.F.O (World Federation of Orthodontics) as well as the F.F.O (French Federation of Orthodontics)

ABSTRACT

Orthodontic pediatric treatment between 3 to 13 years old seems to be a debate for the orthodontic community. Young children need to be identified and treated for their difficulties as soon as these are indicated. My presentation will consider functional difficulties in the context of orthodontic malformation and highlight methods of treatment through the use of appliances.

LEARNING OUTCOMES

1) To consider the detailed assessment which informs the orthodontic treatment in paediatrics.

2) To explain the use of orthodontic appliances in 3-6 year olds.

3) To analyze the effects of early intervention for the management and treatment of cross bite, class II, open bite and class III malocclusions.

DEL GOBBO Wanda | ITALY

Dr. Delgobbo is a private practitioner working in orthodontics alongside Ascoli Piceno in Italy. In 1974 she graduated in medicine and went on to qualify in dentistry in 1978. She has studied extensively throughout her career and has been an instructor in Bioprogressive Orthodontics in Arizona and in Naples. She has undertaken courses in physiotherapy rehabilitation in TMJ under Professor Rocobado and the University of Santiago. In 2004-2005 she undertook a Masters Degree in Craniomandibular Disorders at the Universita Federico II, Napoli. From 2009 she has been interested in the work of Dr. Delaire and she has been involved in carrying out research alongside Dr. Delaire.

PRESENTING WITH

PAGNONI Stefano | ITALY

2011-2017 Dr. Pagnoni graduated with honors in dentistry at Università Cattolica del Sacro Cuore, Roma (IT) in 2017. From 2017 he has been under the mentorship of Dr Wanda Delgobbo's office and been interested in activities promoted by Dr. Jean Delaire. He is currently completing a Masters degree in 3D Orthodontics. Since 2017 he has been in Private Practice working in general dentistry and orthodontics. Publications: "Reasons for Tooth Extractions and Related Risk Factors in Adult Patients: A Cohort Study"(Pier Carmine Passarelli, Stefano Pagnoni, and Antonio D'Addona), Int J Environ Res Public Health. 2020

DELAIRE'S UNIVERSAL MASK: A NEW EXTERNAL ANCHORAGE DEVICE. FIRST RESULTS FOR THE TREATMENT OF CLASS II MALOCCLUSIONS

ABSTRACT

A retrospective study of 3 children looking at the treatment of mouth breathing and snoring in children using the Delaire Universal Mask. The treated children had reduced nasopharyngeal space due to enlarged tonsils with chronic inflammation of the upper airways and who were categorized as mouth breathers. Analysis indicated that the use of the Delaire Universal Mask improved breathing avoiding soft tissue damage of the pharynx while waiting for the physiological regression of the tonsils and adenoids. A larger sample is needed to study the DUM's benefits regarding the palate's increase in volume, given by an "adapted" expansion, and the advancement of the mandible.

LEARNING OUTCOMES

1) To demonstrate a counterforce-free protraction of maxilla and mandible.

2) To outline the importance of orthopedics before myofunctional therapy for optimal improvement in function.

3) To recognize the importance of an early morphofunctional treatment of breathing syndromes to achieve best outcomes.

FELLUS Patrick, MD, DDS | FRANCE

AN INNOVATIVE APPROACH FOR THE RE-EDUCATION OF OROFACIAL PRAXIA THE PASSIVE WAY

Patrick Fellus specializes in dentofacial orthopedics. He serves as the President of the French Pediatric Orthodontic Society, and works at the University Hospital Robert Debré in Paris. Former legal expert in France. He published several peer reviewed articles on various subjects including orofacial myofunctional disorders in French journals.

ABSTRACT

The study looked at the use of a passive device to support swallow and to establish nasal breathing. 48 patients aged between 5-16 were included in the study. They were all diagnosed with atypical swallowing. A swallowing re-education protocol was carried out over a 10 week period and involved the use of a passive neuromuscular rehabilitation device (Froggymouth) worn for 15 minutes daily while seated in front of the TV. The device aimed to modify the patients' proprioception with consideration to the biochemical link from the neurons and neuronal network patterning. Progress was reviewed at 5 and 10 weeks. The results indicated significance in changes to swallow function. This device has application to other clinical groups including Downs Syndrome, autism, children with narcolepsy and cerebral palsy.

LACROIX Michael, | FRANCE

BABY ORTHODONTICS THE MISSING LINK. 0-3 YEARS THE MISSING LINK OF OCCLUSION THROUGH THE FIRST NEURODEVELOPMENT STAGES

Michael has been working in the field of dentofacial medicine sine 1977. From 2007 he has been living and practicing in Switzerland and created the Orthoglobal Sarl (Lausanne) and the Orthoglobal Clinic (Renens) with the aim of promoting paediatric orthodontics, www.orthoglobal.ch. In 2013-2014 he was a teacher at the Swiss Federation of Osteopaths and from 2015 he has been engaged in research looking at early determinants of occlusion according to the early sensorimotor determinants of posture at AIOF (International Association of French-speaking Orthodontists) and CIMF - (International Club of Facial Morphology).

ABSTRACT

From 0-3 years there are determining factors associated with malocclusion indicated in the prenatal period. In the last 3 months in utero as the structure of the postural neuromuscular chains (front -back/ winding extension) are formed to the postnatal period there are suggested associations to physical skill development (vertical, anteroposterior and bilateral balancing of the standing baby). The presentation will discuss the relevance of pre and post natal development influencing breathing, chewing and swallowing and dentition up to 3 years.

THERRY Corrinne, MD | FRANCE

SAGGITAL, TRANSVERSE AND VERTICAL CORRECTION OF ASYMMETRY UP TO AGE 6 YEARS

Corinne Thery-Dumeix is a Member of the French Society of Orthodontics, and obtained the State diploma of Dental Surgery in Nice 1986. In 1984 she obtained the Certificate of Clinical Studies specializing in Orthodontics in 1994. She has worked for Professor Guy Perrier d'Arc in Nice. Since 1988 she has had a private practice in orthodontics in Var La Seyne sur Mer. She is specialist in early orthodontic treatment before the age of 6. She has worked as a trainer in the International Telecrane club of Dr Marie-Josèphe Deshayes teaching on the cranial exploration and early orthodontic treatment of asymmetry.

ABSTRACT

The correction of an asymmetric malocclusion needs assessment of the sagittal , transversal and vertical dimensions, before the age of 6. The presentation will explore how early investigation of the 3 dimensions of anatomical symmetry helps to determine asymmetry and to predict function. For example in the vertical dimension , an upper inclined occlusal plane is linked to reduced masticatory function. The presentation will explore the use of maxillary casting for assessment to demonstrate inter arch asymmetry. Cranial lateral displacement is considered linked to postural involvement together with the movement of the mandibular condyles further influencing function.

LEARNING OUTCOMES

1) To demonstrate how early investigation of the three dimensions of anatomical symmetry helps to determine asymmetry and to predict function.

2) To gain knowledge on techniques of maxillary casting.

3) To consider the relationship between posture on craniofacial development.

BANICA Ela, DDS | ROMANIA

HEALTHY BREATHING: UNLOCKING THE GENETIC POTENTIAL IN CHILDREN BY GUIDING FACIAL GROWTH

Dr. Bănică has a Master of Linguistic Orthodontics at René Descartes University in Paris. She has 14 years as a Specialist in Orthodontics and Dento-Facial Orthopedics. Dr. Bănică introduced the concept of functional orthodontics in Romania, being the only doctor specialized in Preventive or Natural Pediatric Orthodontics, Myobrace and in Orthodontics and Myofunctional Therapy. Ortho Institute collaborates with renowned doctors from Romania and abroad, combining classic values with modern digital services and technologies, in order to offer the most efficient and intelligent treatment methods.

ABSTRACT

This presentation focuses on the importance of promoting early intervention to prevent the early onset of problems associated with caraniofacial development so that children are able to develop optimally. By focusing on early intervention we can fix craniofacial development to cure mouth breathing and reduce OSA, improving cognitive learning and preventing behavioural problems and supporting postural development. The aim is to prevent orthognathic surgery and reduce the effects of asthma and allergies.

LEARNING OUTCOMES

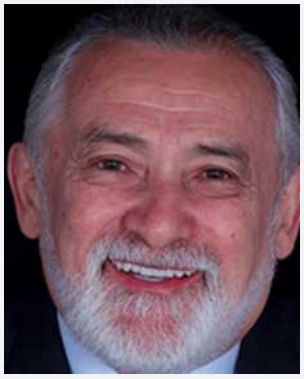
1) To identify the relevance of evaluation children as early as 3 – 4 years of age to promote early intervention.

2) To address the causes of crooked teeth rather than treat crooked teeth.

3) To recognize the negative influences on a child's dental and facial development.

4) Correct orthodontic problems earlier, often without need for braces in the future.

5) To analyze the role of early intervention to improve a young child's health and allow them to achieve their full growth potential.



ARAGAO Wilson, | BRAZIL

INTERVENTION AT 12 MONTHS OF AGE USING THE HBTC_RFA METHOD

President in Brazil of AIO-Asociación Iberoamericana de Ortodoncistas; Member of IFUNA - International Functional Association; Specialist in TMD and Orofacial Pain; Professor of HBTC-RFA courses in Brazil, Italy, Spain, Portugal, Mexico and Israel. He is an expert in orofacial pain, DTM as well as Functional Maxillary Orthopedics. Author of scientific articles published in Brazil, United States of America, Spain. Professor of courses in Brazil, Argentina, Italy, Portugal, Spain, the Dominican Republic, Colombia, Israel and Cuba. Guest Professor of Orthodontics at the University of Barcelona - Spain and at IFUNA - International Functional Association.

ABSTRACT

A clinical case presentation demonstrating the HBTC-RFA method carried out in children in the absence of using a device in children up to 2 years and with the application of the method and the use of a device in children from 2 years up to 10.

LEARNING OUTCOMES

1) To define the assessment and treatment of systemic diseases through assessment of the Stomatognathic System.

2) To demonstrate treatment in the absence of the use of devices for children from birth ot 2 years.

3) To describe treatments for patients from 2 years of age through to adulthood.

LEE Justin, DDS | SOUTH KOREA

EARLY INTERVENTION OF ANTERIOR CROSS BITE

Justin JC Lee is a Pediatric dentist, phD. Head of Seoul Children's Dental Center. A Faculty of Seoul National University, School of Dentistry. A Board of Pediatric Dentistry Association of Asia

ABSTRACT

There are many theories about the causes of anterior cross bites. Early anterior cross bite unless properly intervened, usually progress to Class III malocclusion combined poor growth of nasomaxillary complex.Though there are not enough researches when the premaxilla suture closes, young children's premaxilla are still malleable before age 3. In this presentation I want to share some anterior cross bite cases those were corrected by parent's fingers.

LEARNING OUTCOMES

1) Early detection and intervention of anterior cross bite of young children.

RAMIREZ German, DDS | CANADA

SLEEP AND BREATHING DISORDERS IN CHILDREN: AS A DENTIST, I CAN GIVE HEALTH TO MY YOUNG PATIENTS!

Dr. Ramirez graduated in 1986, obtaining his DDS degree from the Javeriana University in Colombia. Afterwards, he completed a Pediatric Dentistry Diploma in Mexico. Dr. Ramirez interest includes guiding craniofacial growth and development in children. He trained in Orthodontics in Brazil, as well as completed a Master of Dental Sciences and Doctoral degree (PhD) in Oral Biology in Australia. He is a fellow of the Royal College of Dentist of Canada, and has his own practice in Aurora, Ontario. He is a fellow of the Royal College of Dental Surgeons of Ontario and the Royal College of Dentists of Canada, as well as a member of the Ontario Dental Association and the American and Canadian Academies of Paediatric Dentistry. He investigates on Craniofacial Growth and Development, the Patho-Physiology of Functional Disorders in the Cranio-Cervico-Mandibular system and how the craniofacial structures are modified by functional appliances.

ABSTRACT

The correction of an asymmetric malocclusion needs assessment of the sagittal , transversal and vertical dimensions, before the age of 6. The presentation will explore how early investigation of the 3 dimensions of anatomical symmetry helps to determine asymmetry and to predict function. For example in the vertical dimension, an upper inclined occlusal plane is linked to reduced masticatory function. The presentation will explore the use of maxillary casting for assessment to demonstrate inter arch asymmetry. Cranial lateral displacement is considered linked to postural involvement together with the movement of the mandibular condyles further influencing function.

LEARNING OUTCOMES

1) Understand how a deviation in craniofacial growth may impact the airway and air flow in your patients.

2) Recognize mouth breathing as a risk factor for the patient's general health and the importance of treating that habit as early as possible.

3) Envision the importance of including a functional approach when treating patients with sleep and breathing disorders.

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TRACK 2

THE 1ST 1000 DAYS OF LIFE: A CALL TO RADICALLY REIMAGINE PREVENTION, SCREENING, & CARE WITH MYOFUNCTIONAL PRINCIPLES

CATTONI Debora, SLP, MS | BRAZIL

MOUTH BREATHING AND MYOFUNCTIONAL THERAPY

Debora Cattoni is Specialist in Speech Language Pathology (CRFa 2 - 7622), Specialist in Orofacial Myology, Master and PhD in Sciences from the Faculty of Medicine of the University of São Paulo (FMUSP), Professor at CEFAC - Health and Education, Member of the Brazilian Society of Speech Language Pathology (SBFa) and Founding Member of the Brazilian Association of Orofacial Motricity (ABRAMO)

ABSTRACT

The lecture aims to address the stages of a speech therapy treatment approach to support children who are mouth breathers. The presentation outlines the clinical procedures and activities performed during the rehabilitation process, with a practical focus. The presentation will highlight clinical features associated with mouth breathing and their relationship to posture. Myofunctional exercises and the technological resources used during speech therapy treatment will be shared to include respiratory support and laser.

LEARNING OUTCOMES

1) To explain how speech therapy works with mouth breathing children, highlighting treatment approaches used in clinical practice.

2) To recognise the steps of treatment rationale and therapeutic intervention.

3) To recognise the activities used in each stage of orofacial myofunctional therapy.

4) To describe the technological resources used in orofacial myofunctional therapy.

EMANUEL Michelle, OTR/L | USA

INFANT AND PEDIATRIC MYOFUNCTIONAL THERAPY. THE URGENCY OF CARE MEANS THE TIME HAS COME.

Michelle Emanuel OTR/L has been a pediatric Occupational Therapist for 20 years. She has experience working in the NICU, PICU, CICU, and outpatient arenas. Her specialty is the newborn to precrawling baby, and her focus has been on torticollis, plagiocephaly and oral restrictions and dysfunction. Michelle developed the TummyTime! Method program ten years ago in order to empower and equip parents with home activities to support optimal function and development. Michelle has studied extensively with osteopaths, doctors and leading researchers in her quest to provide the highest quality care. She is currently in private practice in Cincinnati, OH providing evaluation and treatment of posture, movement, connection and oral function, as well as teaching and speaking on the topics of Cranial Nerve Dysfunction, Social Nervous System, Autonomic Nervous System Regulation and Resiliency and more.

ABSTRACT

This presentation will explore the application of myofunctional health principles and their concepts to babies, the under ones from newborns to precrawling. The relevance of a multidisciplinary approach will be considered and explored with interdisciplinary timing of intervention.

LEARNING OUTCOMES

1) To be able to apply 3 BabyMyo techniques for the management of babies presenting with the effects of tethered oral tissue.

2) To be able to recognize the relationship of optimal oral function and myofunctional principles.

3) To identify 2 symptoms of myofunctional compromise in a precrawling baby.

FILLIOZAT Isabelle, | FRANCE

THE FIRST 1000 DAYS OF LIFE. A CALL FOR RE-IMAGINATION OF OUR APPROACH WITH A FOCUS ON HOW EARLY OROFACIAL MYOFUNCTIONAL THERAPY COULD CHANGE PARENTING BELIEFS.

Isabelle Filliozat is a french psychotherapist and speaker since 1982. After 20 years of independent practice in psychotherapy, she has been training psychotherapists and parenting professionals for more than 15 years. She is the author of 35 books on emotions, relationships and positive parenting. Translations exist in 26 languages. She delivers conferences, workshops and online resources for parents. In September 2019, she was named vice president of the 1000 days commission by the President of the French Republic.

ABSTRACT

It's a reality, children of today have difficulty to concentrate and tolerate frustration. What's happening to our children? When a child misbehaves, when her emotions overflow, when he goes off the wall or doesn't succeed in school… Parents are usually told to set more and more limits. But symptoms have causes. What if some of these causes were to be found in the first 1000 days of life? The more we learn, the more we realize how a slight problem occurring in this early period may lead to important issues later in life. I will focus on how early orofacial myofunctional therapy can change the lives of children and parents. Sometimes, a behavioral or emotional issue is not "psychological". Our whole belief system is provoked and turned upside down by recent scientific discoveries.

LEARNING OUTCOMES

1) To measure the importance of orofacial prevention and early intervention.

2) To learn to search for the need behind a symptom, whether emotional, cognitive or behavioral.

3) To recognize the relationship between psychology and physiology.

HIDEHIRO Abe, DDS | JAPAN

NEW PEDIATRIC ORTHODONTICS FOCUSING ON RESPIRATION

Abe Hidehiro graduated from Niigata National University School of Dentistry. He owns two nursery schools, and the curriculum focusses on an oral function development program with the aim of promoting the normal development of breathing and swallowing. The facilities are attended by up to to 80 children aged 0-12 years. He also runs a seminar activity and a qualification system called "KOUIKUSI" in Japan which is attended by 800 people a year. He owns an organization called JODA (Japan Oral Development Association) which has 100 dental clinics.

ABSTRACT

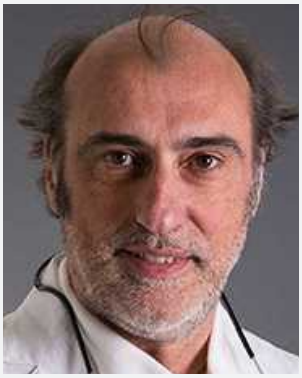
Conventional orthodontics is aimed at arranging teeth neatly. However, as indicated by cephalometric analysis there are many cases where the airway is narrowed. This is due to oral maldevelopment resulting in decreased oral volume and retraction of the mandible. With this presentation children are at increased risk of having obstructive sleep apnea or upper airway resistance syndrome. As a preventative measure to support optimal airway growth breast feeding is indicated together with staged weaning practice and dietary management during the first year of life. As a treatment to support oral and airway development Myofunctional Therapy and the use of appliances such as Myobrace is considered from the ages of 6 and 7, and by the age of 12, teeth are supported through the use of Invisalign. The presentation will look at strategies and techniques "To establish a function and a form capable of widening an airway and supplying sufficient oxygen" through childhood.

LEARNING OUTCOMES

1) To identify risk factors from a dental medicine perspective as predictors for sleep disordered breathing.

2) To discuss clinically effective early intervention as a preventative measure to support children's health reducing health risks associated with a narrowed airway through childhood.

3) To consider and discuss strategies and techniques to "To establish a function and a form capable of widening an airway and supplying sufficient oxygen" through childhood.



LEVRINI Luca, DDS, PhD | ITALY

THE EFFECT OF PACIFIERS ON DEVELOPMENTAL BREATHING PATTERNS

Professor Luca Levrini. Deputy president Dental Hygiene School, University of Insubria, Italy. Assistant Medical Director, Dental Department, Fondazione Macchi Hospital, Varese. Member of the Medical Council, Como, Italy. Medical Journalist. President Fondazione Alessandro Volta, Como, Italy. Author of more than 200 scientific papers dealing with oral prevention and orthodontics.

ABSTRACT

The use of a pacifier is a much discussed topic. It is necessary to clarify the evidence of the literature to give correct recommendations to parents. There are numerous benefits and risks that the pacifier can produce. This presentation will consider the benefit to respiration.

LEARNING OUTCOMES

1) To explain the use of the pacifier with consideration to its risks and benefits.

2) To explore the use of the pacifier and its correlation with craniofacial growth.

3) To explore the benefits of the pacifier to breathing.

O'CONNOR Tony, BDS | IRELAND

SLEEPING LIKE A BABY: THE HEALTH BENEFITS OF FACIAL GROWTH GUIDANCE AND OROFACIAL MUSCLE DYSFUNCTION CORRECTION IN CHILDREN.

Dr. Tony O'Connor is a general dentist working in Cork, Ireland. He graduated in 1979 with a B.Sc (Hons) in biochemistry, and with a B.D.S. (N.U.I.) in 1986. He has a very special interest in non-extraction orthodontics, functional jaw orthopaedics, and in early intervention treatments for children. Dr. O' Connor has taken extensive post-graduate training in these fields over the past 25 years, and is happy to share his experiences.

ABSTRACT

Children's faces are malleable and the bones, which grow rapidly, are guided and molded into position by precise orofacial muscle stimuli, by the activity of the tongue within the oral cavity. However, if for any reason, facial growth does not progress in a forward and downward positive trajectory, the face will fail to reach its full genetic size, shape, and potential, thus compromising the entire stomatognathic system. Visible consequences of negative facial growth in the primary and early mixed dentition can present as Maxillary and Mandibular mismatch, mandibular entrapment, reduced oral volume and tongue space, and crooked teeth. Such malocclusions frequently and adversely influence Nasal respiration and AIRWAY patency, due to reduced lingual volume, negatively impacting sleep, and hence the child's overall health and wellbeing. By adopting an early interceptive philosophy, with functional jaw orthopaedics, and orofacial muscle repatterning, a child's overall health can be greatly enhanced.

LEARNING OUTCOMES

1) To present 3 paediatric case studies treated within the office that demonstrates the benefits of early interceptive treatment.

2) To highlighting the importance and value of a multidisciplinary team approach.

3) To demonstrate how a number of techniques and appliances can be applied in different circumstances to enhance facial growth.

SPRUYT Karen, PhD, HDR | BELGIUM

SLEEP AND THE DEVELOPING CHILD

Professor Karen Spruyt, PhD, National Institute of Medicine and Health (INSERM), University of Lyon (UCBL) earned her degree in child, adolescent, and adult clinical psychology at the Vrije Universiteit Brussel, Belgium, in 1996. Her passion for brain development resulted in an additional master degree in child neuropsychology and alongside another master degree in biostatistics. In 2005 she was awarded the doctoral degree at the Vrije Universiteit Brussel (Belgium) investigating "Pediatric Sleep Problems: a contribution to their identification and relationship with daytime behavior". Dr. Spruyt went to the Monash Institute of Medical Research and Ritchie Center for Baby Health Research in Australia and subsequently she started her research career in the United States at the University of Chicago. She has published more than 70 papers in SCI journals give lectures at international sleep conferences in many countries around the world.

ABSTRACT

Although substantive causative relationships between non-optimal sleep and end-organ dysfunction are limited in children. It is widely assumed that when sleep is reduced either acutely or chronically it is not without changes in brain, behavior and overall health. Thus, the sleep-state and its interrelation to the wake-state can not be ignored in childhood. In this presentation a synopsis of the development of sleep and its measurement will be presented. Next, we will highlight the adverse impact of sleep-disordered breathing on a child's performance. We will end discussing the broader impact of perturbed sleep on child development.

LEARNING OUTCOMES

1) To gain knowledge on sleep in a developing child.

2) To outline the importance of the sleep-development relationship in childhood.

3) To recognize the impact of poor sleep on development.

VILLANUEVA Pia, PhD | CHILE

GOOD ORAL HABITS FROM DAY ONE

Pia Villanueva is a Professor at the Universidad de Chile. She is a Speech, Language and hearing therapist (Universidad de Chile - 1992). Specialist in Orofacial Myology, CEFAC, Brazil. Doctor in Cognitive Science, Universidad de Granada, Master in Dentistry Science, Universidad de Chile. She had stood out as a pioneer by leading the development of research, degree and postgraduate courses in Orofacial Myology (OM) in her country. She is the Chilean head of the World Orofacial Myofunctional Science day. She had written 4 books and more than 50 articles about orofacial myofunctional area and also she had been particularly recognized for incorporating genetic aspects into the research of speech and language science. She is a founding member of the Chilean Society of SLP (SoChiFo), member of IADR, AELFA, SoChiPe. Part of the editorial board of scientific journals in Brazil, Colombia and Chile

ABSTRACT

To contribute to the prevention of orofacial myofunctional disorders and avoiding the occurrence of bad oral habits, most of my efforts have focused on changing pattern: from "evaluation and treatment of bad oral habits" to "prevention and early stimulation of appropriate oral habits". While working with children and their parents, we must promote themes that are not commonly well known, such as the evolution of feeding and speech, and the inclusion of appropriate oral habits. The Inclusion of Appropriate Oral Habits is a protocol intended to assist the prevention of organic, functional and sometimes psycho-emotional alterations, associated with bad oral habits. This tool may be useful to the community of OM therapists to be applied in clinics, schools, kindergartens and mothers' associations.

LEARNING OUTCOMES

1) To identify correct patterns of posture, food consistences and tools to feed a child from day one

2) To define best oral habits to promote in the developing child.

3) To identify the benefits of the application of Appropriate Oral Habits Protocol across pre-school and education settings to assist in the prevention of organic, functional and sometimes psycho-emotional alterations, associated with bad oral habits.

MACHOŚ Marzena Jadwiga, SLP, PhD | POLAND

TONGUE TIE –DIAGNOSIS AND THERAPY IN INFANTS

Phd, the specialist of early clinical speech therapy – Marzena Machoś – the lecturer on a few polish universities, the founder of the Silesian Infant Center "Guguhopla". The author of 6 books – the manuals for both parents and speech therapists and the author of 5 protocols for oral functions assessment and communicative abilities in children. She specializes in newborns and infants with sucking disorders and short frenulum. She developed a method of therapy for infants with tongue tie – miobobo, in which she describes a holistic diagnosis and procedure after frenotomy. She conducts professional trainings for speech therapists in Poland.

ABSTRACT

The aim of the lecture is the presentation of The Protocol of the Tongue Tie Assessment in Infants. The assessment focuses not only on the motor assessment of the tongue, but also on the function of breathing, sucking and eating. The holistic model of diagnosis of an infant with tongue tie allows to note compensations and abnormalities – from the resting position of the lips and tongue, to the abilities of dealing with different consistencies during the introduction to expanding the diet. The protocol was created on the basis of English language scales and descriptions, and M. Machoś's studies conducted on 117 infants with ankyloglossia. The author presents the assumptions of the therapy program „miobobo". It is a suggestion of the work with an infant after the frenotomy, which aims in reorganizing the suction pattern, the change of the resting position of tongue and lips, stimulation of mouthing, work with reflexive oral reactions, improvement of alimentary functions and the prophylactic program for infants with retrusive occlusion and tongue – tie.

LEARNING OUTCOMES

1) To define the assessment of function-breathing, lip resting positon, sucking, reflexive oral functions - to be carried out alongside frenulum assessment to achieve best outcome for the child.

2) To recognise the importance of therapy post frenectomy to improve the resting positon of the tongue and lips, sucking and the integration of reflexive oral reactions.

3) To recognise the role of the multi-disciplinary team in supporting a baby with a diagnosis of tongue tie.

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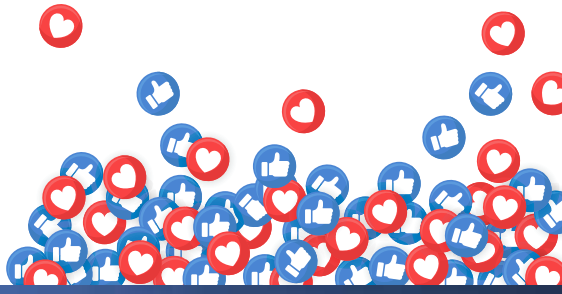


THORP-HOLMSEN Solveig, MD, MPH | NORWAY

TONGUE TIE - BREASTFEEDING AND BEYOND: A CALL FOR NEW STANDARDS OF CARE FOR INFANT SCREENING AND TREATMENT BASED ON MYOFUNCTIONAL PRINCIPLES

Dr. Solveig Thorp Holmsen graduated from University of Oslo, Faculty of Medicine in 1997 and completed a Masters degree in Public Health in 1998. Since 2001 she started work in the Oslo Emergency Room at Oslo University Hospital and where she continues to work as a Consultant Doctor. Solveig wanted to offer better treatment to mothers suffering from lactational mastitis in her clinic and to work with the health system to prevent this condition among mothers. In 2011 she became a medical advisor in the Norwegian National Advisory Unit on Breastfeeding and she is currently specializing in community medicine. Her aim is at a National level to promote breastfeeding and to prevent onset of but also to consider treatment of lactational mastitis. She'S developing a knowledge based National guidance document on the diagnosis and treatment of tongue-tie for infants in Norway and received funding to carry out research in tongue-ties in Norwegian infants.

ABSTRACT

I will take you on my journey beginning in the ER with seeing mothers in pain and with fever caused by lactational mastitis and going on to discover that tongue tie in infants is a common cause for this morbidity. Seeing the connection and then facing my colleagues resistance towards the diagnosis, I searched the literature and found the evidence for the problems that tongue tie in infants may cause and the evidence for best practice treatment. After reviewing hundreds of journal articles, reviews and clinical guidelines, I have enough evidence to conclude that tongue tie in infants is a major health issue and that it is the cause of breastfeeding problems in many cases. My caseload of patients shows the same. We have written a knowledge-based clinical guideline on the diagnosis and treatment of tongue ties in breastfeeding infants in Norway that will soon be published. I had only worked a short time with tongue ties as a cause of breastfeeding problems when I found that the ties are also causing serious eating and nutritional problems in a small group of infants and children. This discovery was unknown in Norway and there is some skepticism about the causal relationship and the treatment was termed experimental. In treating these infants I have gained valuable experience, and I will share some examples from my patient cases and the literature. From my experience and through the literature I have found that a multidisciplinary approach, where myofunctional therapy is a major part of the treatment, is essential to secure a positive outcome and improved infant, child and maternal health.

LEARNING OUTCOMES

1) To recognise the features of tongue tie and how they can negatively impact on breastfeeding with consideration to a review of the literature.

2) To identify the impact of tongue tie on infant and child nutrition and the necessity for early intervention.

3) To recognise the relevance of myofunctional therapy as an essential part of the treatment of all infants and children with tongue tie.

MOELLER Marc Richard | USA

CHAIR PERSON: FIRST 1000 DAYS OF LIFE

Marc Richard Moeller, Managing Director of the Academy of Orofacial Myofunctional Therapy (AOMT), and Executive Director and Founding Board Chair of the Academy of Applied Myofunctional Sciences (AAMS), has spoken on Orofacial Myofunctional Therapy (OMT) in over 30 countries to date and supported the facilitation of research, public health projects, clinical protocols, and curriculum development in OMT with over 50 universities, hospital groups, and governments around the world. Marc is also a Director of Communications of the Stanford Sleep Epidemiology Research Center. Since 2011 Marc has been on a Public Health Committee of the Teste de Linguinha (Frenulum Inspection Protocol). He is a graduate of University of California, San Diego and is based in Los Angeles. Marc is an adjunct professor at the University of the Pacific Dugoni School of Dentistry where he lectures to dental students, orthodontic residents, and the dental sleep residency program.

TRACK 3

OROFACIAL MYOFUNCTIONAL THERAPY & ORTHODONTICS

BOYD Kevin, DDS, MSc | USA

MINOR MALOCCLUSIONS IN EARLY CHILDHOOD (UNDER 71 MONTHS OLD) PREDICT MAJOR PROBLEMS BEYOND

Board certified Pediatric Dentist in Chicago who also holds a Master's degree in Human Nutrition and Dietetics. He teaches in the Pediatric Dentistry residency program at Lurie Children's Hospital and serves as a dental consultant to their sleep medicine clinic. Dr. Boyd is a visiting scholar at the University of Pennsylvania Museum of Archeology and Anthropology conducting research in post-industrial evolution of the human face and airway-related structures. He lectures worldwide on pediatric OSA, evolutionary oral medicine and early intervention orthodontics.

ABSTRACT

As most all malocclusion phenotypes observed in non-syndromic children nowadays are largely resultant from orofacial myo-dysfunctional (OMD) factors, they are accordingly preventable. In terms of being reliably predictive for subsequent dentofacial-related esthetic problems in later life, Mild Malocclusion Traits (MMTs) are often described as being subtle or non-progressive and thus non-problematic, or maybe only minimally problematic. As a result, when MMT's initially become apparent within the primary or early mixed dentition they are not usually definitively diagnosed and appropriately treated until the problem will have persisted and worsened into a major malocclusion during later childhood or adolescence. It is now widely reported that certain MMT's in early childhood, specifically maxillary and/or mandibular retrognathia, transverse deficiency and/or sub-optimal vertical growth, can frequently be associated with increased risk for developing sleep and respiratory hygiene-related comorbidities. Furthermore, as certain systemic and neurological problems such as cardiovascular disease, hypertension, neuro-cognitive, neuro-behavioral, and/or inattention problems, are frequent comorbidities with pediatric SRBD/OSA, it seems a medically-indefensible position to recommend watchful waiting for MMT's to become more severe as being an ethical strategy for solving health problems that might be coincident with MMT's when first detected in early childhood.

LEARNING OUTCOMES

1) Attendees will be shown empirical and published evidence sufficient for describing the following as being both scientifically-supportable and medically-defensible practices:

2) Routinely performing screening assessment of Sleep Related Breathing Disorders (SRBD) in earliest childhood, and appropriate referral for confirmation of increased risk by a qualified medical professional is in the best short- and long-term health interest of all children.

3) As many malocclusion traits are first evident in pre-school-age children (under 6 years-old), perhaps even in utero, will seldom (if ever) self-correct, will usually persist and worsen and are often co-morbid with SRBD, routinely performing screening assessment of early childhood malocclusion (ECM)/ severe-early childhood malocclusion(s-ECM), and appropriately timed-/ applied treatment, or referral for appropriately timed-/applied treatment, is in the best short- and long-term health interest of all children.

4) Advising adult caregivers of children who have been diagnosed (by a physician) with Adeno-and/or tonsillar hypertrophy for which adeno-and/or tonsillectomy is being contemplated or already scheduled, that post-surgical SRBD/OSA symptom persistence has been a documented problem within refereed medical literature dating back to the late 19th-Century through the present day; and, adjunctive dentofacial orthopedic intervention might improve surgical outcomes.

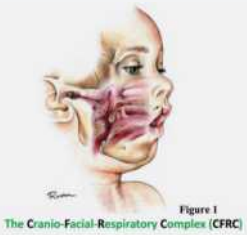


Figure 1
The Cranio-Facial-Respiratory Complex (CFRC)

MEW John, ORTH | UK

TBA

Professor John Mew graduated in dentistry at University College London and then trained in Orthognathic surgery at the Royal Victoria Hospital, East Grinstead where he developed an interest in the science of facial growth. Seeking alternatives to facial surgery he returned in 1965 to University College to specialise in orthodontics. Since then he has been developing non-surgical methods of correcting vertical growth in children's faces. In the 1970s he wrote several papers on the new sub-specialty of 'Orthotropics' which aims to encourage horizontal growth by changing oral posture. He has written a textbook and published many articles internationally on this subject. John has recently been described both as "a maverick" and "the brightest orthodontist who has ever lived".

IMAMURA Miho, PhD, DDS | JAPAN

EARLY USE OF FUNCTIONAL ORTHODONTICS & MYOFUNCTIONAL THERAPY FOR IMPROVED LONG TERM OUTCOMES

Miho Imamura, DDS, PhD is a 1986 graduate of the Nippon dental school in Tokyo, Japan. She graduated from Japan University Orthodontic Course in 1988. From1988 to 2002 she studied preventive dentistry research at the DesMoines College in Iowa, USA. In 2003 she opened the M.I.H.O.orthodontic clinic (private clinic in Kofu Japan) where she currently works. She is a professional certified board member of the Japan Orthodontic Association and the Japan Adult Orthodontic Association. Dr. Imamura is a founder and board member of the Japanese Society for Oral Myofunctional Therapy.

ABSTRACT

A comparison study over a 2 year period of 34 girls examining digital data of measurements in lip strength, tongue tip elevation, lingual frenum, mouth opening, left and right occlusal forces before treatment. Orthodontic treatment was carried out alongside Myofunctional Therapy. The data highlighted significant changes and improvements. The results suggest that the use of the EF Line running in parallel with Myofunctional Therapy supported change improving occlusion and stability. The presentation will discuss the relevance and importance of early observation and treatment with EF Line and its use alongside Myofunctional Therapy which is used as an effective treatment to support occlusion and stability with positive functional outcomes.

LEARNING OUTCOMES

1) To learn how EF line with Myofunctional Therapy can support improved occlusion and stability.

2) To recognize the importance of early observation and treatment with the aim of achieving improved occlusion and good functional outcomes.

3) To explore the value of digital monitoring to monitor clinical outcomes.

MAHONY Derek, BDS, MDS, MORTH | AUSTRALIA

THE CRUCIAL ROLE OF ORTHODONTICS IN THE MULTI-DISCIPLINARY TREATMENT OF PAEDIATRIC OSAS

Derek Mahony is a world renowned Specialist Orthodontist who has spoken to thousands of practitioners about the benefits of interceptive orthodontic treatment. Early in his career Dr Mahony learned from leading clinicians the dramatic effect functional appliance therapy can afford patients in orthodontic treatment. He has been combining the fixed and functional appliance approach ever since. His lectures are based on the positive impact such a combined treatment approach has had on his orthodontic results and the benefits this philosophy provides from a practice management viewpoint. Dr. Mahony is a Specialist Orthodontist who has been in private practice for over 30 years. Dr Mahony is a contributing editor to the Journal of Clinical Pediatric Dentistry, International Orthodontic Journal and Spanish Journal of Dentofacial Orthopedics.

ABSTRACT

3329 children between ages of 7-9 years were followed and referred for orthodontic consultation by their general dentist. They were studied with the aim of assessing the most effective combination of treatment in the management of sleep disordered breathing over a 15 year period. Baseline measures were taken and sleep studies highlighted revealed mild to moderate sleep apnea, or other symptoms of SDB.The patients were assigned to 1 of 4 treatment groups, plus a control group who did not receive any treatment (group 5): 1) ENT surgery only, or 2) ENT surgery and Myofunctional therapy, with a night time appliance (myobrace) (MFT) or 3) ENT surgery and orthopaedics/orthodontics, and 4) ENT surgery, orthopaedics/orthodontics, MFT and a night-time appliance (myobrace). On follow up clinical effectiveness demonstrating significance for the variables measured was demonstrated for Group 4, where ENT surgery, Myofunctional therapy and orthodontic surgery were used. The results recommend for the complete resolution of OSAs, in children, requires appropriate orthodontic treatment, such as maxillary development, maxillary protraction, and mandibular translation. The following questions will be discussed in relation to this piece of research.

LEARNING OUTCOMES

1) To compare different combined treatment modalities for the treatment of pediatric OSAS highlighting clinical effectiveness
-Identify and define the relationship between malocclusions and SDB in children.

2) To identify the common ENT procedures that help restore nasal breathing in children.

3) To provide a summary of the most favorable dentofacial orthopaedic treatment outcomes in pediatrics .
-To define the clinical effectiveness of Myofunctional Therapy as a treatment modality for sleep disordered breathing when compared with a control group.

HANG William M, DDS, MSD | USA

ORTHODONTICS PLUS MYOFUNCTIONAL THERAPY... CAN 1 + 1 = 5?

Dr. Hang has developed a truly unique orthodontic practice with strong emphasis on facial esthetics achieved with innovative early treatment and adult treatment. Approximately 15 years ago he became aware of the significant positive affect some of his treatments were having on the airway. This opened up a whole new aspect of orthodontics - maximizing the airway for ALL orthodontic patients and specifically treating patients with SDB (sleep disordered breathing) or OSA (obstructive sleep apnea).

ABSTRACT

James Nestor's book, Breath, The New Science Of A Lost Art is a gift to all of us! It outlines the importance of proper rest oral posture to idealize forward facial growth and informs the public that nasal breathing is essential for optimizing health. With this gift being dropped in our collective laps, orthodontists and myofunctional therapists need to work together to help the public be healthier and live longer lives. There has never been a better time for practitioners who understand this to collaborate and have coordinated treatment strategies that can yield results more successful than two separate treatments. Yes, 1+1 can equal 5!

LEARNING OUTCOMES

1) Ways to optimize forward facial growth in growing children of all ages.

2) What constitutes the new airway friendly paradigm of non-retractive orthodontics and why it is essential for establishing proper rest oral posture and nasal breathing.

3) Strategies for non-surgically developing maxillary intermolar width 12mm. or more even in selected adults to achieve proper rest oral posture.

4) How these two professions can and must work together to help our patients be healthier.

THELLIEZ Emmanuel, ORTH | FRANCE

ORTHODONTICS AND OBSTRUCTIVE SLEEP APNEA IN CHILDREN

Emmanuel Thelliez MD is a graduate in orthodontics, osteopathy and postural deficiency.

ABSTRACT

Proproceptive difficulties are managed and treated by a range of professional disciplines and the subject of research. In this study improvement for children with diagnosed co-ordination difficulties to include dyspraxia and dyslexia is demonstrated during orthodontic treatment. This presentation explores how an appliance can alter lingual perception improving lingual function through stimulation of the trigeminal nerve with the result of altering whole body perception and improving co-ordination.

LEARNING OUTCOMES

1) To demonstrate the impact of orthodontic treatment as a treatment to reduce proprioceptive deficiencies associated with dyslexia.

MEW Mike, BDS (Lond), MSc (Orth) (UK) | UK

WHAT, WHY HOW?

Lecture and lead clinician at the London School of Facial Orthotropics. Dr Mike Mew lectures and teaches extensively around the world. His personal interest is in the growth and development of the face, and understanding the factors that influence it. He has put forward the concept of Craniofacial Dystrophy to explain the cause of crooked teeth, sleep apnea, many ENT problems and TMD in 2014. Suggesting that they are all symptoms of a single underlying problem. Dr Mike is focused on advancing the orthotropics concept to achieve significant morphing of the craniofacial skeleton to improve dental and general health. He is reputed to be currently gaining some of the most significant changes in facial form for growing children and non-growing adolescents yet achieved, and has the aim to achieving similar changes in non-growing adults.

ABSTRACT

What is the problem? Craniofacial Dystrophy and the relationship between facial form, sleep disordered breathing, malocclusion and failure to thrive. Why do they occur? This did not occur in our ancestors, what is causing these problems? How can we treat this or even prevent with simple public health initiatives?" Medicine is about understanding and treating the cause of a problem or even affecting the causes to prevent a problem. Dr Mew will argue that the medical profession does not really understand what the problem is that we are all treating and demonstrate the connection between a range of seemingly disconnected problems from sleep disordered breathing to malocclusion, ADHD, body posture and many ENT problems. He will explain the main aetiological factors and the pathological process underlying with range of issues. He will then outline treatment approaches and possible prevention strategies. Knowledge is powerful.

LEARNING OUTCOMES

1) Understanding what the underlying problem that we are all treating from different directions actually is.

2) Understanding the aetiology and pathology of this problem.

3) Understand what treatment approaches might work. What possible public health prevention strategies could be organised by a national health system and implemented at home and school.

PIRELLI Paola, DDS MS | ITALY

A REVOLUTION IN THE TREATMENT OF OSAS CHILDREN: RAPID MAXILLARY EXPANSION

Paola graduated in Dentistry and Specialist in Orthodontics. She is Assistant Professor and Researcher at the Department of Clinical Sciences and Translational Medicine, University of Rome "Tor Vergata". For over 35 years she has been involved in Dentofacial Orthopedics. Her practice and research is dedicated to children, working out of the University Hospital and in her private practice in Rome. She is co-author of the Ministry of Health's national guidelines on OSAS in children 2016.She was a Member of the Regional Technical Committee on OSAS 2017. She actively lectures in meetings and courses and she is author of many scientific publications. She first introduced Rapid Maxillary Expansion treatment in the OSAS of children as pioneer of this field. She has been invited as a key note speaker on this subject to many international meetings and she has published several original articles on international journals.

ABSTRACT

Orthodontists may play an important role in the interdisciplinary treatment of OSAS. This presentation will explore Rapid Maxillary Expansion treatment in the young patient which can be effective and can have a favorable orthopedic role in modifying facial bony structures and in conditioning further developmental processes positively. We were the first, with Dr. Guilleminault, to publish this topic, and today R.M.E. has been recognized by the scientific community as an important contribution.

LEARNING OUTCOMES

1) To evaluate the benefits of an interdisciplinary approach to the treatment of OSA children.

2) To recognize the importance of the association between OSAS and maxillo-facial malformations.

3) To outline the role of Rapid Maxillary Expansion therapy in the treatment of OSA children.

QUO Stacey, DDS | USA

MOUTH BREATHING AND CRANIOFACIAL MORPHOLOGY IN OSA PATHOGENESIS: ORTHODONTIC AND MYOFUNCTIONAL INTERVENTION WITH REGARD TO NASAL BREATHING

Dr. Quo is an accredited orthodontist. This means that she is a dental specialist who has completed an advanced post-doctoral course, accredited by the American Dental Association, of three academic years in the specialty of orthodontics. She is dedicated to creating outstanding smiles for her patients, implementing technologies to continuously improve her results. Dr. Quo is a member of the American Dental Association, California Dental Association, the American Association of Orthodontists, Pacific Coast Association of Orthodontists, California Association of Orthodontists, Mid Peninsula Dental Society, American Cleft Palate-Craniofacial Association, American Academy of Sleep Medicine, American Academy of Dental Sleep Medicine, Pierre Fauchard Academy.

ABSTRACT

OMT objectives of establishing lip seal and nasal breathing have potentially significant implications in the treatment of and, perhaps, prevention of SDB, but not enough is known about the mechanisms that could result in mouth breathing or the techniques, such as breathing reeducation as a part of OMT, to address them. It is the intention of this presentation to understand further what is involved in the development of mouth breathing, its potential consequences in SDB, and the OMT mechanisms involved in their resolution. From the establishment of swallowing patterns and their relationship to sleep to brain imaging to confirm stable neuroplastic stability, this symposium will explore novel approaches and metrics around mouth breathing and SDB.

LEARNING OUTCOMES

1) Appraise the correlation between mouth breathing and SDB.

2) Recognize the role of breathing re-education as a part of orofacial myofunctional therapy as an adjunct treatment for SDB.

3) Describe the potential role of mouth breathing in the onset of OSA.

SANTOS Marisa, DDS | ARGENTINA

THE ADVANTAGES OF TREATING TODDLERS USING AN ORTHODONTIC APPROACH ALONGSIDE MYOFUNCTIONAL THERAPY TO IMPROVE QUALITY OF LIFE

Dr. Marisa Santos is a dentist, an orthodontist and a professor at Maimonides University in Buenos Aires, Argentina. For over 20 years her practice has been dedicated to working with children with careful consideration to supporting airway growth and facial growth. In 2010 she decided to go to London to graduate with a Diploma in LSFO with John Mew. She is very aware of the interdisciplinary team working with her to create effective change for her patients and has been developing her style of practice over the last 5 years.

ABSTRACT

Early preventive orthodontic treatment gives children a chance of improving general health, correcting body posture, improving airway and helping with the treatment of Obstructive Sleep Apnoea (OSA). The role of the mouth in the pathogenesis of OSA, in terms of mandibular position, dental malocclusion and high arched palate is highly relevant. For these reasons an early orthodontic and myofunctional intervention is valuable. Through case studies the benefits of early interdisciplinary treatment are highlighted starting at age 2 years. There is longitudinal evidence through monitoring data on a group of children through childhood to demonstrate change to facial features and airway.

LEARNING OUTCOMES

1) To recognize the benefits of an early interdisciplinary approach to support craniofacial growth.

2) To define the benefits of early intervention in children aged 2 years versus taking a traditional approach from age 7 years.

3) To recognize measurable changes in facial growth tracking children from 2 years - 7 years.

DE FELICIO Claudia | BRAZIL

THE REHABILITATION OF OROFACIAL FUNCTIONS: WHY AND HOW

Dr. Cláudia Maria de Felício is Speech and Language Pathologist (SLP), Specialist in Orofacial Motricity (Orofacial Myofunctional Therapy – CFFa 140/97), Master in Education, Federal University of São Carlos, SP (UFSCar), Ph.D. in Science, University of São Paulo (USP, Brazil). Currently, she is a professor at the Post Graduation Program in Ophthalmology, Otorhinolaryngology, and Head and Neck Surgery of the School of Medicine of Ribeirão Preto, USP, and Researcher at the Craniofacial Research Support Center USP – Ribeirão Preto (SP). She has written 91 scientific papers for national and international journals (53 abstracts in the PubMed.gov). She has also authored books and book chapters about orofacial myofunctional evaluation and therapy.

ABSTRACT

The presentation's objective is to show how validated and reliable clinical orofacial myofunctional evaluation with scores protocol (OMES) and instrumental methods contribute to the understanding of changes in the functionality of the stomatognathic system. Thus, it favors the diagnosis of orofacial myofunctional disorders, the planning, and selection of therapeutic strategies for treatment and outcome measures. Each of the topics covered will be based on research findings and exemplified with suggestions for Orofacial Myofunctional Therapy for children and young people undergoing orthodontic treatment, adults with temporomandibular disorders, Sjögren syndrome or older people dental prosthesis users.

LEARNING OUTCOMES

1) To outline the validated OMES protocol (Felício et al., 2008, 2012).

2) To recognize the relationship between research and how it informs clinical practice.

3) To define the therapeutic goals of the Orofacial Myofunctional Therapy, including possible neuroplasticity.

MANENTI Rebecca Jewel, MD | ITALY

Rebecca Jewel Manenti graduated in Dentistry at the Universidad Europea di Madrid in 2018. After her degree she attended the Advanced Training course in Anatomy of the Temporomandibular joint and maxillary bones at the University Sapienza di Roma. She currently is a student at the Specialization in Orthodontics at the Università degli studi dell'Aquila.

MARZO Giuseppe, MD | ITALY

Giuseppe Marzo is Professor of Odontostomatological Diseases at the University of L'Aquila. Director of the School of Specialization in Orthodontics in the University of L'Aquila. He is member of the Technical Group in Dentistry of the Ministry of Health and of the Governing Council of the Order of Doctors of Rome. He is past-President SIOI, member of the SIOI Scientific Committee and site manager in Chief of the European Journal of Pediatric Dentistry.

TELEMEDICINE: A TOOL TO FACILITATE THE INTERACTION BETWEEN ORTHODONTISTS AND SPEECH-LANGUAGE PATHOLOGISTS IN MYOFUNCTIONAL THERAPY

ABSTRACT

Abstract. Telemedicine is a technological tool that is improving health systems around the world. This virtual platform can be used on smartphones or webcam-enabled computers and allows physicians to effectively screen patients. This technology may help patients who have myofunctional disorders to obtain care from distant and different specialists. In fact the evolution of this tool allows a multidisciplinary assessment performed by several clinicians on different platforms. In complex pathologies, such as myofunctional alterations, where the causes can be multiple, a telematic approach can be usefully used. Several specialists can connect and interact through network platforms such as Zoom©, Apple FaceTime©, Facebook Messenger© video chat, Google Hangouts© video, Zoom© and Skype© and work as a team. The necessary communication between orthodontists and speech-language pathologist during the treatment of patients could be realized thanks to this technology so that specialists can meet sharing their knowledge and trying to find a solution to improve the patient's quality of life. In this regard, performing a visit to the patient through the Zoom© platform is used to show an example of a multidisciplinary assessment done by orthodontists and speech therapists of a complex case that involve myofunctional therapy.

GIANCASPRO Silvia, MD | ITALY

Silvia Giancaspro graduated in Dentistry at the Universidad Europea of Madrid in 2018. After her degree she attended the Advanced Training course in Anatomy of the Temporomandibular joint and maxillary bones at the University Sapienza of Rome and in Advance Facial Aesthetic Medicine at the University of Tor Vergata of Rome. She is currently a student at the Specialization in Orthodontics at the Università degli studi dell'Aquila.

QUINZI Vincenzo, MD | ITALY

Vincenzo Quinzi is Professor both at the Specialization School in Orthognathodontics in at the Specialization School in Pediatric Dentistry of the University of L'Aquila. He is ordinary member of SIDO (Italian Society of Orthodontics) from 2010 and in the years 2011-2012 he was National Delegate for relations with Young Orthodontists. He is member WFO (World Federation of Orthodontists), SIOI (Italian Society of Pediatric Dentistry), SIOCMF (Italian Society of Odontostomatology and Maxillofacial Surgery), SUSO (Unitary Union of Orthodontics Specialty Union), SIDOC (Italian Society of Conservative Dentistry). He is speaker at Congresses and Conferences of Orthodontics and Dentistry and author of books and many articles.

SACCOMANNO Sabina, MD | ITALY

Sabina Saccomanno is a dentist specialized in orthodontics. She teaches orthodontics, continuing education courses, dentistry to 4th and 5th year students, and she is the Chair of the level II Master in Comprehensive Orthodontic Therapy program at the Catholic University of Sacro Cuore in Rom, Italy. Also for the Sacro Cuore she teaches a course on dysfunctions of the orthognathodontic system in children at the faculty of Medicine and for the degree in dental hygiene. For the Policlinic Gemelli in Rome she is responsible for all the orthodontic-myofunctional therapy treatments. She has authored several articles and books focusing on issues related to Down Syndrome as well as myofunctional therapy, and lectured extensively on these subjects. She currently collaborates with the School of Specialization in Orthodontics in the University of L'Aquila directed by Prof. Giuseppe Marzo.

THE CONTRIBUTION OF TELE-ORTHODONTICS DURING COVID-19 FOR RESPIRATORY PROBLEM CAUSED BY NARROW PALATE

ABSTRACT

During COVID-19 emergency, dental clinics suspended all deferrable procedures to limit the spread of the pathogen. In fact, to implement a home-based therapy and to reduce the direct participation of the clinician, a model of orthodontic care that combines the traditional way of treatment with tele-orthodontics is proposed. Video meetings permitted to monitor the patient's respiratory habits (open-mouth breathing vs. nasal breathing), chewing and swallowing pattern and oral health to document an evident malocclusion. In patients undergoing palatal expansion therapy, photos and video calls were efficacious for the continuation of the treatment (e.g. implementing and monitoring the activations). Furthermore, this tool is helpful to manage cases of swelling and lesions on the palate and to check if the patient has improved nasal breathing and has reduced symptoms of sleep disorders, promoting a myofunctional therapy after the orthodontic therapy. Moreover, tele-orthodontics plays a preventive role in the spread of the virus. In fact, many systematic reviews underlined the fact that children show milder cases and better prognosis than adults, even though they can spread the infection. Diagnostic findings have been similar to adults, with fever and respiratory symptoms being prevalent, but fewer children seem to have developed severe pneumonia. Thus, considering that the COVID-19 is a respiratory pathogen, it is advised to continue the palatal expansion to prevent or solve any respiratory problems caused by a narrow palate.

TRACK 4

BREATHING: FUNCTION & DYSFUNCTION

COURTNEY Rosalba, Osteopath, PhD | AUSTRALIA

AN INTEGRATIVE AND FUNCTIONAL APPROACH TO NASAL BREATHING REHABILITATION

Rosalba is an osteopath with over 40 years of experience in clinical practice. She also has a PhD from RMIT University on the subject of dysfunctional breathing and integrative breathing therapy. She has also trained in orofacial myology. She is actively involved with research and has published over 14 academic articles and several text book chapters related to her research. Rosalba is a member of the Osteopathic Research Alliance (ORA) and various professional organizations including the International Society for the Advancement of Respiratory Psychophysiology (ISARP) and Osteopathy Australia (OA) and American Academy of Physiological Medicine and Dentistry (AAPMD).

ABSTRACT

Nasal breathing has important immune, mechanical, sensory and neurological functions and it's the foundation for good health, proper structural development and optimal breathing patterns. Despite the importance of nasal breathing a significant proportion of the adult population and up to 50% of children mouth breathe. Anatomical issues contributing to decreased capacity of the nasal cavity and increased nasal resistance can be an underlying cause of mouth breathing. However, extent of nasal resistance is not the only determinant as demonstrated by failure of surgical and orthodontic treatments to restore nasal breathing in all cases. The nose has multiple functions including smell, hydration, humidification of inspired air, brain regulation, immune defense and regulation of breathing control. It is part of the whole interconnected breathing system, which in turn is affected by neurological, psychological, and bio-mechanical and biochemical factors. Restoration of normal nasal breathing in treatment resistants cases can be assisted by strategies that consider the unified airway, rehabilitate the broad range of nasal functions disrupted by 'nasal disuse" and consider the functionality of the whole breathing system. This presentation describes an integrative and multidisciplinary approach to nasal rehabilitation that can be customized to treatment of adults and children.

LEARNING OUTCOMES

1) To identify the anatomocial presentations which contribute to the decreased capacity of the nasal cavity and increased nasal resistance, a cause for mouth breathing.

2) To explore strategies and treatment techniques to restore normal nasal breathing.

3) To identify the range of nasal functions which are disrupted by 'nasal disuse" to include the impact of neurological, psychological, and bio-mechanical factors affecting the functionality of the breathing system.

4) To explore the integrative and and multidisciplinary approach to nasal rehabilitation that can be customized to treatment of adults and children.

MOYA DAZA Maria-Paz, SLP, PhD (c) | CHILE

MORPHOLOGICAL AND FUNCTIONAL EFFECTS OF NASAL OBSTRUCTION

María Paz Moya Daza, Speech and Language Pathologist (SLP), Master in University Teaching (UA, Chile), Ph.D. candidate in Morphological Science at the Faculty of Medicine of the University De La Frontera (UFRO). Currently, she is an Assistant professor at the Faculty of Health Science at the Universidad Autónoma de Chile, Temuco (UA, Temuco). She is author of several studies and scientific research book chapters on orofacial motricity. She was a coordinator of the book "Evaluación e Intervención Logopédica en Motricidad Orofacial y Áreas afines". Her areas of interest are diagnosis, treatment or/and rehabilitation of oral breathing and other disorders of orofacial motricity.

ABSTRACT

Breathing is a vital function from the moment of birth. Research shows that this function has an important influence on other motor functions, such as swallowing, chewing and speaking. Recent studies with rats also reveal to us the impact of nasal obstruction at early developmental ages on craniofacial growth and development and on other aspects of general health. These investigations suggest the need to update evaluation and intervention protocols in children with oral respiration caused by myofunctional therapy.

LEARNING OUTCOMES

1) To know the influence of respiratory function on craniofacial growth.

2) To know the influence of respiratory function on other orofacial functions.

3) To analyze scientific literature related to nasal obstruction in controlled experiments carried out on laboratory animals.

4) To evaluate the probability of getting a correlation between effects of nasal obstructions from animal studies and human disorders of health.

McKEOWN Patrick, MA, BBE | IRELAND

FUNCTIONAL BREATHING TRAINING WITH EMPHASIS ON SLEEP DISORDERED BREATHING FOR PEDIATRICS AND ADULTS

Ireland based international breathing instructor and author Patrick McKeown was educated at Trinity College Dublin. He completed his clinical training in Russia in 2002, accredited by the physician and breathing expert Dr. Konstantin Buteyko. Patrick was a chronic asthmatic for most of his life, experiencing high perceived stress and poor sleep. In 1998, he addressed his breathing pattern disorders leading to a dramatic improvement to his health. His work has been published by leading publishing houses including Harper Collins (UK), William Morrow Press (USA), Red Wheel Weiser (USA), Sperling & Kupfer (Italy), Kanki Publishing Inc. (Japan). His 2015 book, The Oxygen Advantage, which was published in fourteen languages, combines specially formulated techniques to increase oxygen delivery to the brain, improve sleep, enhance concentration and retain focus under stress.

ABSTRACT

Restoring light, slow and deep (LSD) breathing in the treatment of sleep apnea Subjects over 40 years of age are six times more likely than younger subjects to spend more than 50% of their sleep time utilising oro-nasal breathing (Madronio 2001). Oral breathing increases the severity of sleep apnea via a number of mechanisms. Pharyngeal airway dimensions are lower in oral breathing than nasal breathing (Alves 2011) and with this an increase in upper airway resistance. There is also a marked reduction in upper airway muscle activity when air bypasses the nose (Fitzpatrick 2002). Poor upper airway muscle responsiveness increase the duration of obstructive events as greater stimuli are required to activate the muscles to terminate the obstruction (Deacon 2016). In addition, oral breathing results in greater use of the accessory muscles of respiration with reduced diaphragmatic amplitude. This reduces lung volume resulting in decreased stiffening and dilation of the pharyngeal airway (Jordon 2014). Finally, nasal nitric oxide plays a role in the maintenance of muscle tone, regulation of neuromuscular pathways in the pharyngeal muscles, spontaneous respiration and sleep regulation (De Sousa 2014). Restoring nasal and functional diaphragmatic breathing is essential to addressing a number of mechanisms involved in obstructive sleep apnea.

LEARNING OUTCOMES

1) To recognize the relationship between dysfunctional breathing and the phenotypes of sleep disordered breathing.

2) To categorize the phenotypes of obstructive sleep apnea are in both children and adults

3) To identify the causes of mouth breathing associated with nasal obstruction and behavior.

4) To implement exercises which aim to decongest the nose and to support nasal airway breathing.

5) To demonstrate exercise options to change the behavior of oral breathing in children.

NESTOR James, Science & Sports Journalist | USA

BREATH: THE NEW SCIENCE OF A LOST ART

James Nestor is an author and journalist who has written for Scientific American, The New York Times, The Atlantic, and more. His new book, Breath: The New Science of a Lost Art, was released on May 26, 2020 and was an instant New York Times Top 10 bestseller. Breath explores the million-year-long history of how the human species has lost the ability to breathe properly.

ABSTRACT

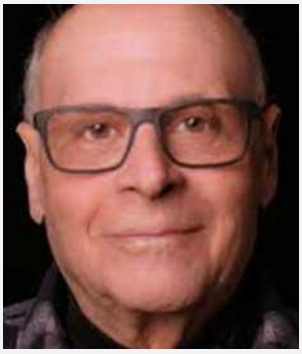
Most of society—doctors included—view breathing as a passive action, something that we just do: breathe, live; stop breathing, die. But breathing is not binary. It's not just that we do it that's so important. How we breathe matters; the ways in which we inhale and exhale are in many ways as important to our health and longevity as what we eat, how much we exercise, or whatever genes we've inherited. Journalist James Nestor leads us through discoveries from the several years in the science of breathing, including a novel 20-day experiment at Stanford University comparing the effects of nasal breathing and mouth breathing on sleep, athletic performance, and overall health.

LEARNING OUTCOMES

1) To understand an overview of how the human skull has changed and how that impacts breathing.

2) To demonstrate how the pathway in which we breathe affects snoring and sleep apnea.

3) To explore how healthy breathing can help attenuate the symptoms of several chronic diseases.



BELFOR Ted, DDS | USA

FACE AND AIRWAY DEVELOPMENT

Dr. Theodore R. Belfor is a graduate of New York University College of Dentistry, and a Senior Certified Instructor for the International Association for Orthodontics (IAO). In the 1960s, Dr. Belfor was sent to Vietnam to work as the sole brigade dentist for 4,000 soldiers of the 196th Light Infantry. From the jungles of Vietnam to Park Ave in Manhattan, upon his return, he opened his own private dental office in New York City and has been in private practice for more than 40 years. Dr. Belfor has been lecturing on his specialty worldwide, teaching and training dentists with the Homeoblock™ appliance and his unique diagnostic protocol for more than 18 years. His work is devoted to understanding the causes of sleep and breathing disorders through individual patient craniofacial analysis.

ABSTRACT

Archeologists have confirmed and James Nestor has written about the fact that our faces and airways are shrinking. Smaller airways have presented us with sleep and breathing problems. The American Association for Orthodontists, in their white paper, under the etiology of sleep apnea have claimed sleep apnea is due to the collapsibility of the airway. The oropharyngeal airway is a muscular tube and appliance and myofunctional therapies can be shown to reduce this collapsibility. The genioglossus muscle is the largest muscle for maintaining the airway, the geniohyoid muscle is the most efficient muscle for maintaining the opening of the airway. The collapsibility of the airway is directly related to the amount of sleep time that is spent in an oxygen desaturation event. We will direct our treatment to the suprahyoid, infrahyoid, genioglossus and hyoglossus muscles to improve sleep and breathing. Furthermore we will show that epigenetic orthodontics can grow the maxilla and change the facial structure.

LEARNING OUTCOMES

1) To introduce Epigenetic Erthodontics to the myofunctional community.

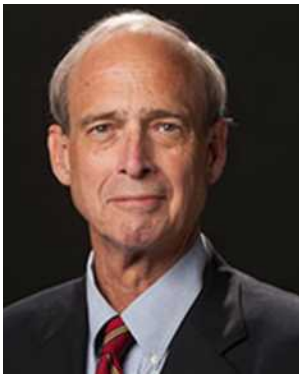
2) to integrate dental appliance therapy with myofunctional therapy.

3) to demonstrate treatment results using James Nestor as a case study.

EVANS Mariana, DDS, MS | USA

NEW RESEARCH ON SKULLS, EVOLUTION AND CRANIO FACIAL MORPHOLOGY FROM MY WORK AT THE UNIVERSITY OF PENNSYLVANIA

Dr. Marianna Evans is a full-time practicing orthodontist, periodontist and dental implant surgeon. She is a diplomate of the American Board of Periodontology and American Board of Orthodontics. Her interdisciplinary training and years of clinical experience allow her to see the interconnectivity of gum disease, malocclusion and skeletal function in a way few specialists can. Dr. Evans was also a Clinical Associate at The University of Pennsylvania Department of Orthodontics from 2010-2016 and a Consulting Scholar at The University of Pennsylvania Museum of Archaeology and Anthropology from 2016-2019 where she conducted research on jaw development in humans of the pre-industrial era. She also developed several orthopedic protocols and plastic surgical techniques within her specialties, frequently lectures on orthodontics, periodontics and dental implants both within the United States and around the world.



COLQUITT Tom, DDS | USA

2020 BREATHING NASODIAPHRAGMATICALLY: STORIES FROM THE ROAD ON THE WALKS TO WELLNESS - INCLUDING MINE

In 1970, after graduating from Baylor College of Dentistry, Tom Colquitt, DDS began practicing in Shreveport, LA where he still maintains a private practice. His practice has expanded beyond Dentistry and "Dental Sleep Medicine" into reinventing a new multidisciplinary medical model focused on detecting and correcting dysfunctional breathing in patients of all ages. Dr. Colquitt has been addressing and studying nocturnal sleeping/bruxism issues since the 1970s and treating nocturnal breathing issues with oral appliances since the 1990s. Additionally, he has been an adjunct professor in the Sleep Fellowship Program at LSUHSC medical school in Shreveport, LA since 2007 where he presents airway from a dental prospective to departments of Sleep, Neurology, and Pediatrics annually.

ABSTRACT

Seven years ago, I was able to reverse my lifetime of chronic inflammatory disease beginning at age 68 by doing a controversial 18- month self-treatment to improve my structural and functional airway problems. I was a habitual mouth-breather with my head and shoulders slumped forward to maintain a patent airway and had Central Sleep Apnea due to over-exhalation of CO2. I was sick and tired of being sick and tired. Along with wearing Homeoblock appliances only at night, I learned these behaviors: Close my mouth with my tongue up and forward where it belongs to provide a patent Oropharyngeal Airway. Inhale slowly and silently during the daytime from my nose to my diaphragm and exhale even more slowly, again through my nose. This promoted high Heart Rate Variability and Autonomic Homeostasis. Tape my lips closed at night during and after treatment to insist on naso-diaphragmatic breathing when asleep. Chew slowly and swallow using only my tongue and not my facial muscles.Do daily routines to learn to stand up straight with my head and shoulders back over my core where they belong. The results were miraculous and have probably extended my remaining life span by reversing so many of my chronic inflammatory disease processes...A Walk to Wellness.After 18 years in our practice of only Managing Sleep Breathing Problems with Mandibular Advancement Devices (the cornerstone of "Dental Sleep Medicine" at that time) we could use different appliances to grow and maintain the airway without the common negative bite changes caused by the Headgear Effect and practical techniques. We can work in an interdisciplinary way to cure disordered breathing for all. The age of the patient does not matter. This presentation is my story and the stories of other patients who are now much healthier and sleeping more restoratively.

LEARNING OUTCOMES

1) To recognise why mouth-breathing, irrespective of Obstructive Sleep Apnea, will kill you slowly and before your time.

2) To define the benefits of establishing default Naso-Diaphragmatic breathing 24/7/365.

3) To realise why blood levels of Carbon Dioxide are more critical than blood levels of Oxygen.

4) To consider the application of the strategies discussed can be a benefit to helping yourself, your family, your friends, and your patients.

IMPORTANT LINKS

AAMS GENERAL WEBSITE

https://aamsinfo.org/

CONGRESS PAGE

https://aamsinfo.org/2020-congress/

CONGRESS PROGRAM

https://aamsinfo.org/wp-content/uploads/2020/07/DRAFT-2020-VIRTUAL-CONGRESS.pdf

FLYER DOWNLOAD LINK

https://aamsinfo.org/wp-content/uploads/2020/07/2020-CONGRESS-FLYER-FINAL.pdf

REGISTRATION WEBSITE

https://go.aamsinfo.org/aams-congress

TRACK 5

FRENULUM INSPECTION, SURGERY, & REHABILITATION ACROSS THE LIFESPAN

BOTZER Eyal, DMD | ISRAEL

Eyal Botzer has a DMD from the Hebrew University School of Dental Medicine, 1990. Post Graduate program in Pediatric Dentistry, 1995. Research Fellow at the NYU Dental School, 1995-96, training in a new technique for the treatment of cleft lip and palate at the NYU Medical Center Institute of Craniofacial Reconstructive Plastic Surgery. Director of the Pediatric Dentistry Clinic at the Tel Aviv Sourasky Medical Center. Specializes in pediatric dentistry and the treatment of neonates with craniofacial anomalies. Engaged in tongue tie research and participated in the first three IATP Summits as a founding member of the IATP. Co-authored several articles on Tongue Tie and & performed over 10 thousand frenotomies on newborns with breastfeeding difficulties.

PRESENTATION #1

WOUND MANAGEMENT FOLLOWING FRENOTOMY

ABSTRACT

Tongue tie is being recognized in the last 2 decades as a major cause for many systemic issues. The effects of tongue tie on the growth and development of the newborn are well known and range from difficulties in breastfeeding, to severe growth retardation (FTT). Tongue-tie can also have a significant negative impact on behaviour and health throughout life. Frenotomy is the most common procedure to correct the restriction and most tongue tie practitioners recommend exercises immediately after the surgical procedure.To date there is very little scientific data to support this practice yet it is based on the clinical experience of dozens of providers (LC'S, surgeons, body workers).This presentation will cover the scientific and clinical background of post frenotomy wound care and will suggest a clinical protocol.

LEARNING OUTCOMES

1) To recognize the rationale behind AWM and tongue training in neonates.

2) To learn about wound healing phases.

3) To learn about the Liper device as a tool for tongue training.

PRESENTATION #2

LIP TIE - WHAT DO WE KNOW ABOUT IT?

ABSTRACT

The release of a Lip-Tie is being advocated by many providers around the world, but what is the scientific data behind it? In this lecture I will share what is my approach and my experience with Lip-Tie release and its value to improving function.

LEARNING OUTCOMES

1) To identify the the anatomic structure of the central maxillary frenulum.

2) To recognize the science and indication for surgical intervention.

3) To learn about the surgical technique for neonatal labial frenotomy.

EMANUEL Michelle, OTR/L | USA

OPTIMAL TIMING OF TONGUE TIE RELEASE

Michelle Emanuel OTR/L has been a pediatric Occupational Therapist for 20 years. She has experience working in the NICU, PICU, CICU, and outpatient arenas. Her specialty is the newborn to precrawling baby, and her focus has been on torticollis, plagiocephaly and oral restrictions and dysfunction. Michelle developed the TummyTime! Method program ten years ago in order to empower and equip parents with home activities to support optimal function and development. Michelle has studied extensively with osteopaths, doctors and leading researchers in her quest to provide the highest quality care. She is currently in private practice in Cincinnati, OH providing evaluation and treatment of posture, movement, connection and oral function, as well as teaching and speaking on the topics of Cranial Nerve Dysfunction, Social Nervous System, Autonomic Nervous System Regulation and Resiliency and more.

ABSTRACT

A presentation on how oral function, posture, nervous system regulation and whole body movements are informed by the presentation of tongue lip and buccal restrictions. Working therapeutically to support these aspects gives insight into the optimal timing of release with the aim of achieving the best function.

LEARNING OUTCOMES

1) To be able to define 3 features of nervous system dysregulation.

2) To recognize and differentiate between 'Identification to Release' and 'Optimal Timing of Release' Models.

3) To define 3 physical characteristics which benefit from Optimal Timing of Release.

GUZMAN Luis Ruiz, MD | SPAIN

PUBLIC HEALTH BENEFITS OF ANKYLOGLOSSIA SURGERY IN PRIMARY CARE: A POPULATION CASE STUDY IN BARCELONA

Dr. Luis Ruiz-Guzman is a Pediatrician, specialist in breastfeeding with a Diploma in Tropical Medicine from the University of Barcelona, a Master in Public Health Maternal and Child from the University of London and a Diploma in Mammary Pathology from the University of Barcelona. He has been working on private consultation for Breastfeeding from 1997 to the present. Currently he is the Coordinator of UDIADEAN (Outpatient intervention unit of Ankyloglossia), he's a Pediatrician at the Primary Health Care Center 17-September in Prat Llobregat. He works at the Breastfeeding Unit of the Dexeus University Institute and he's a Professor of Breastfeeding in University of Barcelona. He teaches courses on breastfeeding to professionals of the Catalan Association Pro Alletament Matern, the Institut de Estudis de la Salut of the Catalan Government.

ABSTRACT

The pathogenesis of tongue tie and the major or minor expression of the genotype that causes it are not known because it can occur with inheritances X-linked dominant or, in some cases, recessive. Four families with tongue tie in different generations, accompanying infants with breastfeeding problems are presented. In all cases there was a lack of prior knowledge of this situation in patients and family members. In our medical office, 326 sibling groups were attended. In 133 of them, no frenectomy was performed, in 96 dial one of the brothers underwent surgery, in 91 the two brothers were operated and in 6, three brothers. Prevalence in siblings of 44.9% was found. The underdiagnoses of ankyloglossia is conditioned by the unawareness of some consequences of this pathology: dental malposition, alterations of the spine, speech disorders, respiratory problems and apnoea, among others. Large samples are needed to study the transmission mechanisms and clarify the pathogenesis of this inherited malformation, which affects more than 10% of the population.

LEARNING OUTCOMES

1) Development of Ankyloglossia Unit in Primary Health Care

2) Implementation and development difficulties

3) Population health benefits of the unit

KOTLOW Larry, DDS | USA

Dr. Kotlow is recognized nationally and internationally as an expert in the field of pediatric dentistry and laser dentistry. He speaks on pediatric oral care and on the use of lasers for treating all dental conditions, especially in newborns and infants. He is one of the few dentists recognized by the Academy of Laser Dentistry to certify other dentists in standard proficiency to use lasers and has achieved the position of Mastership status from the Academy of Laser Dentistry. He presented at the The Academy of Laser Dentistry, The American Academy of Pediatric Dentistry, and The American College of Dentists. He presented courses and seminars in Sydney, Melbourne, Perth and Brisbane, Australia; Taipei, Taiwan; Tel Aviv and Jerusalem, Israel; and Edmonton, Toronto, Canada.

PRESENTATION #1

OBSTRUCTIVE SLEEP APNEA IN INFANTS AND TODDLERS

ABSTRACT

The tongue should be part of any differential diagnosis or assessment in infants and toddlers presenting with a variety of medical problems, Traditional dental and medical school training teaches us that the tongue is merely a muscle free at one end and attached to the oral cavity at the other.

In reality the tongue should be considered a major organ which exerts its effects on many of our body systems. This presentation will look at understanding how to determine many of the tethered tongue's effect in the infant and toddler and how ankyloglossia can product negative effects well into adulthood, specifically oral dysfunction and brain development.

LEARNING OUTCOMES

1) Defining Medically necessary care.

2) Is it OSA or Just a Tethered Tongue.

3) How to properly examine, evaluate and diagnose OSA when considering TOTS.

4) How TOTs left untreated can affect Adults.

PRESENTATION #2

COMPLICATIONS OF UNTREATED TETHERED ORAL TISSUE AND OBSTRUCTIVE SLEEP APNEA

ABSTRACT

The tongue should be part of any differential diagnosis or assessment in infants and toddlers presenting with a variety of medical problems, Traditional dental and medical school training teaches us that the tongue is merely a muscle free at one end and attached to the oral cavity at the other.

In reality the tongue should be considered a major organ which exerts its effects on many of our body systems. This presentation will look at understanding how to determine many of the tethered tongue's effect in the infant and toddler and how ankyloglossia can product negative effects well into adulthood, specifically oral dysfunction and brain development.

LEARNING OUTCOMES

1) How OSA can affect brain development.

2) The importance of preventing fragmented sleep.

3) OSA and behavior.

4) How OSA can affect skeletal development.

5) The Team.

LUEDEMAN Amy, DDS | USA

Dr. Amy L. Luedemann is a native Houstonian who has been involved in providing dental care since 1990. She started as a dental assistant and went on to put herself through school until she reached her ultimate goal of becoming a pediatric dentist, where her two loves – children and dentistry – come together every day. She graduated with honors in her undergraduate studies of Nutrition and Psychology. She obtained her Doctor of Dental Surgery degree in 2005 from the University of Texas Dental Branch – Houston. She then traveled to Seattle, Washington where she received her Pediatric Specialty Training and a Masters degree from the University of Washington.

PRESENTATION #1

FRENECTOMY FAILURE: HOW IT HAPPENS, HOW TO AVOID IT AND WHAT TO DO WHEN IT HAPPENS LASER ASSISTED THERAPEUTIC RELEASE IN FRENULUM SURGERY: A NEW CONCEPT

ABSTRACT

The aim of frenectomy release is to improve functional skills. This presentation explores and attempts to define successes alongside failures through reflection using a case study approach. It will discuss common failures and to identify features of failure (not about compliance on post frenectomy exercises) and what could be done differently in the course of practice to avoid them. It will give clinically led suggestions on how best to handle them to achieve success and to create change calling for a higher standard of care.

LEARNING OUTCOMES

1) To define what a frenectomy failure looks like (vs success).

2) To recognise why failure can occur (outside of compliance).

3) To identify the plan on care to avoid failure and discuss a call for higher standards of care.

PRESENTATION #2

LASER ASSISTED THERAPEUTIC RELEASE IN FRENULUM SURGERY: A NEW CONCEPT

ABSTRACT

This presentation aims to discuss Laser Assisted Functional Therapeutic Release (LAFTR) for frenectomy. It will take a look at signs for patient readiness to achieve best results. This will be demonstrated through the use of case studies. There will be a discussion around how to carry out dual-wavelength laser assisted functional therapeutic release in frenulum surgery and a review of standards of care including the standards of care currently used at Kids Town Dental Practice. This presentation will call for higher standards of care in the use of this technique.

LEARNING OUTCOMES

1) To identify patient readiness for frenectomy and what is a clinician looking out for from a dental perspective.

2) To explain and review standards of care in the practice of LAFTR with an opportunity to consider this through reflective case studies.

3) To recognize the concept of dual-wavelength laser assisted functional therapeutic release in frenulum surgery, a call for a higher standard of care.

MILLS Nikki, ENT, PhD | NEW ZEALAND

WHAT IS A TONGUE TIE? DEFINING THE ANATOMY OF THE LINGUAL FRENULUM

Nikki has been a Pediatric ENT Consultant at Starship Children's Hospital in New Zealand, specializing in pediatric airway and swallowing disorders for over 10 years. She has a particular clinical interest in supporting mothers and infants having difficulty breastfeeding. Nikki leads a Multidisciplinary Dysphagia clinic at Starship, working closely with Lactation Consultants, Speech-language pathologists and other medical subspecialties. She has 4 research publications relating to the functional anatomy of breastfeeding, as part of her recently completed PhD thesis on "The Functional Anatomy of Sucking and Swallowing in Breastfeeding Infants".

- **The tongue is a muscular hydrostat**
- **The lingual frenulum is:**
    - A dynamic structure
    - Formed by a layer of fascia & overlying mucosa
    - Not a string/band/cord
    - Has normal variability in appearance
- **That "lingual frenulum" is not synonymous with "tie"**
- **The floor of mouth fascia has:**
    - A primary role in suspension of the tongue
    - Potentially conflicting roles of tongue stability versus mobility
- **There is still a lot we don't know**

ZAGHI Soroush, MD | USA

ASSESSMENT OF POSTERIOR TONGUE MOBILITY USING LINGUAL-PALATAL SUCTION: PROGRESS TOWARDS A FUNCTIONAL DEFINITION OF ANKYLOGLOSSIA

Dr. Soroush Zaghi graduated from Harvard Medical School, completed residency in ENT (Otolaryngology- Head and Neck Surgery) at UCLA, and Sleep Surgery Fellowship at Stanford University. He now serves as medical director of The Breathe Institute where the focus of his sub-specialty training is on the comprehensive treatment of nasal obstruction, mouth breathing, snoring, and obstructive sleep apnea in children and adults. He is very active in clinical research with over 80+ peer-reviewed research publications in the fields of neuroscience, head and neck surgery, myofunctional therapy, and sleep-disordered breathing. Dr. Zaghi is particularly interested in studying the impact of tethered-oral tissues (such as tongue-tie) and oral myofascial dysfunction on maxillofacial development, upper airway resistance syndrome, and obstructive sleep apnea, especially as it relates to pediatric populations.

ABSTRACT

A functional definition of ankyloglossia has been based on assessment of tongue mobility using the tongue range of motion ratio (TRMR) with the tongue-tip extended towards the incisive papilla (TIP). Whereas this measurement has been helpful in assessing for variations in the mobility of the anterior one-third of the tongue (tongue tip and apex), it has been insufficient to adequately assess the mobility of the posterior two-thirds (body) of the tongue. A commonly used modification is to assess TRMR while the tongue is held by suction against the roof of the mouth in lingual palatal suction (LPS). This presentation will present data from a cross-sectional cohort study of 611 subjects (ages: 3-83 years) from the general population validating the TRMR-LPS as a useful functional metric for assessment of posterior tongue mobility. We encourage future studies on functional ankyloglossia to consider assessments of TRMR-TIP for assessment of anterior tongue mobility, and TRMR-LPS for assessment of posterior tongue mobility. Normative values and proposed grading scale are provided as TRMR-TIP Grade 1> 80%, Grade 2: 50-80%, Grade 3: < 50%, Grade 4: < 25%; TRMR-LPS Grade 1> 60%, Grade 2: 30-60%, Grade 3: <30%, Grade 4: <5% or unable to sustain.

LEARNING OUTCOMES

1) To identify the historical context and limitations of assessments for tongue-tie and tongue-mobility.

2) To recognize the importance and role of the assessment of tongue mobility in lingual palatal suction.

3) To define the normal and below average ranges for tongue mobility in lingual palatal suction as compared to measurements with tongue to incisive papilla with TRMR as previously published by our group.

ROGERS Katrina, SLT | UK

THE IMPACT OF POSTERIOR TONGUE-TIE ON SWALLOW FUNCTION. WHAT'S THE CLINICAL EVIDENCE? A REVIEW OF THE LITERATURE

Katrina is a specialist speech and language therapist working as a Consultant in Dysphagia in Kent Community NHS Foundation Trust. She has an independent practice, and trained as an orofacial myofunctional practitioner. She is an honorary lecturer at Christchurch University, Greenwich for pediatric Dysphagia. 2019 winner of the Winston Churchill Memorial Trust Fellowship where she will be tasked with exploring how to establish OMT in the NHS of the UK.

ABSTRACT

The matter of 'its only a tongue-tie' can mean an interruption to all phases of swallow function distorting strength, pressures and ultimately swallow safety. At its worst in my clinical practice I meet children who have had an ongoing history of respiratory illness and failure to thrive leading to a confirmed diagnosis (using Videofluoroscopy) of aspiration. Through a lack of knowledge a number of children are placed on tubes to support their nutrition without consideration to a tongue-tie diagnosis which has a negative effect on a child's development and parents' mental health and wellbeing. This presentation is a review of the current evidence and literature taking a look at how tongue-tie affects the dynamic swallow process with consideration to chewing, preparing the food bolus; pre-swallow, holding and containing the bolus for swallow; during swallow the pharyngeal phase, how tongue-tie influences airway closure and as there are swallow strength and pressure issues; the potential negative impact on the transition of the food into the oesophagus and risks of aerophagia. It takes a look at measures of tongue function related to normal swallowing and explores the anatomy and physiology associated with the emergence of ankyloglossia. It also sets out to review the influence of the impact of tongue-tie on swallow function antenatally, in the neonate through infancy and into childhood. Included is an overview of the underlying anatomical relationships associated with normal swallow function with special consideration to the relationship of tongue to hyoid complex and the muscle innervation. The presentation is explained through case studies so it has clinical relevance to professionals working in clinical practice.

LEARNING OUTCOMES

1) To outline the evidence and to define the relationship between tongue-tie and disruption to the swallow process contributing to poor respiratory health in children.

2) To be familiar with the anatomy and physiology associated with the emergence of ankyloglossia in embryological development and how this relates to tongue movement antenatally and in the neonate for the start of feeding.

3) To define the underlying anatomical relationships associated with normal swallow function with special consideration to the relationship of tongue to hyoid complex and the muscle innervation demonstrating how oral mechanics can be disrupted by ankyloglossia causing dysphagia .

4) To define the effect of tongue-tie on swallow function antenatally, in the neonate through infancy and into childhood.

OLIVI Giovanni, MD | ITALY

SHORT LINGUAL FRENUM: A COMPREHENSIVE APPROACH

Giovanni Olivi graduated cum laude in Medicine and Surgery (MD) and in Dentistry (DDS). Dr.Olivi achieved the Master status from the Academy of Laser Dentistry (2006-2009) that also awarded him, in 2007, with the "Leon Goldman Award" for clinical exellence. Author of over 70 papers and 4 textbooks on laser dentistry Giovanni Olivi is currently professor and scientific Coordinator of the "Laser Dentistry" proficiency and master courses at Chatholic University of Rome.

NORDSTROM Darick, DDS | USA

ORALASE: NEW, UNIQUE TECHNOLOGY AND SCIENCE FOR A NEW ERA OF MYOFUNCTION

His knowledge and experience gained throughout the years of development and use of the ALF has allowed ALF Therapists to support transformative patient care and achieve amazing results. The ALF appliance has revolutionized the role of dentistry in the scope of healthcare as we know it and has the potential for helping generations of people lead healthier, more functional lives while creating beautiful, balanced faces. The simple sophistication of the ALF family of appliances provides opportunities that surpass the expectations of both patients and providers when properly utilized by adequately trained providers in a TEAM approach to wellness.

ABSTRACT

Oral myofunctional is the key player in both craniofacial development, as well as in cognitive and social development and maturation. Forty years of teamwork with myofunctional therapy has identified barriers that are not resolved with even the most talented training.

The development of OraLase was begun in 2006 to address these limiting barriers, and has evolved to become repeatable and predictable; concurrently, the associated science has expanded our understanding of critical natural processes underlying its effectiveness.

LEARNING OUTCOMES

1) To recognize the difference between truly tethered tissue that requires surgical intervention, and fascial restrictions that are rapidly and deeply resolved, and (most importantly) integrated with OraLase

2) To consider the influence of even early, perinatal trauma, as well as life trauma in creating restrictions, compensations, and coping patterns that derail OMT, and why OraLase has been so effective in opening the window for OMT success

3) To consider the importance of natural, spontaneous conversion of primitive protective and developmental reflexes (including 2 newly identified reflexes) in the maturation of oral myofunction and development of resilience, and how OraLase rapidly facilitates the conversion of retained/active primitive reflexes.

GRANDI Diana, SLP, MS | SPAIN

INCIDENCE OF ALTERED LINGUAL FRENULUM IN ADULTS WITH OBSTRUCTIVE SLEEP APNEA

Diana Grandi has a Master's Degree in Bioethics and Law and a Bachelor's Degree in Speech and Language Pathology. She was Vice-Dean of the Col·legi de Logopedes de Catalunya from 2001 to 2015. She has been President of the Second Ibero-American Symposium on Orofacial Motricity (II SIAMO) in Madrid, 2017. She is a founding member of the AAMS, and member of the Board of Directors of the AELFA-IF (Spanish Association of Speech Therapy, Phoniatrics and Audiology and Iberoamerican Speech Therapy). Currently, she is the Coordinator of the Master in Orofacial Motricity (UManresa - UVic-UCC) and a collaborating professor at the UIC Faculty of Dentistry (International University of Catalonia). She works as a Speech Therapist specializing in Myofunctional Therapy in Barcelona, in her private practice, at the Marcó Orthodontic Clinic, and in Dr. Albares Sleep Medicine at the Teknon Medical Center. She is the author of articles, book chapters and co-author of several interdisciplinary orofacial detection protocols.

ABSTRACT

As We know altered lingual frenulum, if not detected and treated promptly, influences negatively the various functions of the stomatognathic system throughout life.

Sleep is not beyond its influence, since restful nights require adequate breathing that depends, on a lingual position that does not cause obstruction, among other factors.

There are a significant number of adults with snoring and sleep apneas that are receiving various treatments without having their lingual mobility assessed. The effective solution requires addressing all factors, morphological and functional, before prescribing the most appropriate treatment.

LEARNING OUTCOMES

1) To recognize the importance of the association between Obstructive Sleep Apnea (OSA) and altered lingual frenulum in adults.

2) To assess the benefits of interdisciplinary detection of the altered lingual frenulum before defining the treatment of OSA.

3) To identify patients who need lingual frenectomy to facilitate orofacial myofunctional therapy (OMT) treatment.

MARCHESAN Irene, SLP | BRAZIL

SPEECH PRODUCTION AND ANKYLOGLOSSIA

Dr. Irene Marchesan is director of the prestigious CEFAC Institute in Sao Paulo and President of the Brazilian Speech Language Pathology Society, is one of the foremost leaders of myofunctional therapy in the world. She is the most published researcher in the field and a visionary for the establishment of myofunctional therapy as a standard of care. One of the most published authors of articles on frenum inspection, she, along with Roberta Martinelli, is lead architect of Brazil's "Frenum Inspection Law" requiring as of January 2015 that all babies born in that country have their frenulum inspected and, if warranted, to be revised to avoid myofunctional disorders later in life.

TRACK 6

CRANIOFACIAL MORPHOLOGY & THE PHYSICAL BODY

BURGET Frankie, OT | USA

FASCIAL INTEGRATIVE THERAPY A NEW PARADIGM FOR WHOLE BODY HEALING

Frankie Burget, 2016 and 2019 Occupational Therapist of the Year, has been a National Board Certified Registered and Licensed Occupational Therapist with Lifetime Certification in the Fort Worth/Dallas Metroplex for over 30 years. She is also a Licensed Massage Therapist and Instructor. Owner of Windsong Therapy and Wellness, Inc., in Bedford, TX, she is well-known in the medical community. She is Board Certified in Integrative Medicine and Pediatrics.A graduate of Texas Women's University, Frankie's unique accumulation of education in many fields of therapy gives her a credibility that is unequaled. She is a Mastery Level Myofascial Release Therapist, is pursuing her Diplomate Certification from Upledger Institute for CranioSacral Therapy, certified in NeuroDevelopmental Treatment, Medical Massage and Wellness Education.

ABSTRACT

Fascial Integrative TherapyTM is a trademarked system of treatment developed by Frankie Burget, OTR/LC. It is a specialized form of manual bodywork that gently manipulates the underlying soft tissue structure in the body called fascia. The fascial system integrates all the other systems, holds the body's shape and maintains its integrity to allow mobility, motility and stability promoting the body's innate ability to heal itself. Frankie Burget saw the need for a different type of manual bodywork that would take into consideration all elements of the physical and emotional body. This work sees the body as a puzzle and looks at the whole picture, not just a single piece of the puzzle. By combining different treatment methodologies, Fascial Integrative TherapyTM works as a super- charged, highly effective approach to total body healing. It looks at how the interplay of multiple stressors, emotional factors and physical trauma combine to manifest as a specific symptom of dysfunction or dis-ease. It addresses such diverse diagnoses as tongue tie, digestive issues, migraines, PTSD, and pain syndromes, to name a few, because it looks at the whole body. Having this bodywork before a tongue tie revision or myofunctional therapy makes those modalities more effective.

LEARNING OUTCOMES

1) To identify why fascia is a separate whole body system and to consider its integration with other body systems, including the emotions.

2) To recognize the influence of fascia as a whole body system and its influence on healing.

3) To assess and identify structural and postural imbalances.

4) To explore the the relationship between structural imbalances and the multitude of diagnosis that may result from those imbalances.

GILDEN Brad, PT, DPT, FAAOMPT, FFMT, CSCS | USA

A PHYSICAL THERAPIST'S ROLE IN EARLY IDENTIFICATION AND TREATMENT OF ORAL AIRWAY HEALTH PROBLEMS; A ROAD MAP FOR INTERDISCIPLINARY CARE

Brad graduated from New York Medical College in 2000 with a master's in physical therapy. In 2004, he completed a clinical doctorate in upper quarter & hand therapy from Drexel University. He is fellowship trained in Functional Manual Therapy through the American Academy of Orthopedic Manual Physical Therapy. For the past 15 years he has worked collaboratively on the relationship between posture has airway, sleep, and recovery as it relates to overall health and well-being. Brad follows the combined approach of Functional Manual Therapy and the Postural Restoration Institute (PRI); treating movement dysfunction and postural awareness while integrating therapeutic modalities. He has studied in myofunctional therapy, osteopathic manipulation, fascial manipulation, behavioral breathing, and autonomic nervous system balancing.

ABSTRACT

Physical therapists are trained in posture and movement analysis. The need to breath for survival overrides any other human function often causing postural compensation that can develop into neurological, physiological and muscle skeletal disorders. Early detection and multidisciplinary evaluation and treatment are critical to eliminate or reduce the detrimental impact of these compensations. This presentation will demonstrate how physical therapists play a crucial role as part of the multi-disciplinary team and will provide a combination of research, clinical reasoning, and experiential learning.

LEARNING OUTCOMES

1) To identify a physical therapist's role in pediatric airway health.

2) To be familiar with the tools physical therapists use to evaluate and treat oral airway dysfunction.

3) To outline a roadmap for interdisciplinary care between physical therapy, myofunctional therapy, and dentistry.

BERRETIN-FELIX Giedre, | BRAZIL

ORTHOGNATHIC SURGERY: MYOFUNCTIONAL APPROACH

Ms. Berretin-Felix is a graduate in Speech Language Pathology (Bauru School of Dentistry, University of São Paulo - 1996), with a Master's degree in Oral Physiology (Campinas State University - 1999), Ph.D. in Physiopathology in Clinical Medicine (Paulista State University Júlio de Mesquita Filho - 2005) and post doctorate in Swallowing Disorders (University of Florida - 2010). She is currently a Titular Professor, Department of Speech Therapy and Audiology, Bauru School of Dentistry, University of São Paulo, Editor-in-Chief of CEFAC - Speech, Language, Hearing Sciences and Educational Journal, and productivity researcher fellow by the National Council of Scientific and Technological Development.

ABSTRACT

Patients with dentofacial deformities present adapted functional orofacial characteristics and some disturbances can be found in this population, such as mouth breathing, inefficient chewing, swallowing with functional limitations, and damage in the production of speech sounds. Myofunctional therapy must be planed considering different phases of dental treatment. During orthodontic therapy (before surgery), it is relevant to establish a nasal breathing pattern, to manage signals and symptoms of temporomandibular disorders and to prepare the orofacial musculature, according to surgical mandibular movements and changes that will happen in the intraoral morphology, following orthognathic procedures. After surgery, the myofunctional therapy is necessary to avoid functional recurrence, reorganize the oral motor coordination, improve mandibular movements, stimulate sensitiveness and establish functional patterns of chewing, deglutition and speech, appropriated to the new dentofacial skeletal morphology.

LEARNING OUTCOMES

1) Identify functional problems resulting from the dentofacial deformity.

2) know how the orthognathic surgery impacts orofacial functions.

3) Understand the role of speech-language therapists in the interdisciplinary team, in different moments of the dental treatment.

LALAUZE Roselyne, POL, DO | FRANCE

IS IT POSSIBLE TO COMPENSATE FOR GROWTH DEFICITS RELATED TO MAJOR CRANIOFACIAL SYNDROMES IN THE EARLY YEARS OF LIFE?

Roselyne Lalauze Pol practices pediatric osteopath specialized in the management of children with maxillofacial syndromes and neuro-motor disorders. Member of the International Club of Facial Morphology and the Parisian Perinatal Health Network. PhD student in 2nd year SIEB at EPHE-PSL. President of SEROPP (Research Society in Perinatal and Pediatric Osteopathy).

ABSTRACT

From a cohort of more than 600 eumorphic children, photographed from the front, from 1 month to 6 years old, we were able to analyse and quantify the proportions of 312 children, thanks to facial recognition software. The FACE software was entirely developed within the Chart laboratory of the EPHE PSL-research. The transformation into thermic images makes it possible to make the photographs anonymous. FACE allowed us to determine the growth rate of the three facial stages from this control group. It can objectify and quantify about forty parameters to highlight growth deficits in children with severe facial deformation or facial malformation, such as hemifacial microsomia. Mao's study shows that exogenous mechanical stimulation can effectively modulate sutural growth, the weak forces exerted producing sutural deformations. However, for major craniofacial syndromes, the plastic capacities have not been studied at the level of the face of children ; the only care corrections currently proposed are surgical and/or orthognatic. After 15 years of osteopathic practice in a paediatric maxillofacial surgery department, FACE has allowed us to objectively quantify the partial recovery of the growth deficit compared to the healthy side in certain children presenting a dysmorphosis of genetic origin. This growth gain, quantified from 3 to 6 months, is related to the osteopathic mechano-transductive mobilizations targeted at the areas affected by the growth deficiency.

LEARNING OUTCOMES

1) To recognize the role of software and its use to measure a child's cranio-facial growth.

2) To consider the use of cranio-facial software as a tool to reliably measure osteopathic facial treatment of children with major cranio-facial syndromes.

3) To learn about the use of manual mechanical transducing forces to objectively measure growth gain and the compensations for growth deficits in major syndromes.

MINAEV Sergey, PhD, DDS | RUSSIA

THREE DIMENSIONAL ANALYSIS OF THE CERVICAL SPINE IN MOTION DURING SWALLOWING IN CHILDREN WITH MALOCCLUSION (CLASS II) AND ADULTS WITH TMD USING AN ULTRASOUND BASED SYSTEM

Dr Sergey Minaev (Phd) is a highly motivated internationally certified dentist with 20 year experience in prosthetic dentistry. He has an interest in combining traditional methods with digital technology which allows him to give the best possible treatment to patients as well as constantly searching for new solutions, studying advanced electronic components and implementing new knowledge into medical practice. Since 2009 he has focused on the treatment of temperomandibular joint disorders conducting functional analysis with advanced technology. He has an interest in digital profiling of patients through intra-oral scanning and 3d printing.

ABSTRACT

The purpose of the study set out to explore the relationship between atypical swallowing and maloccusion in adults with TMD and paediatrics with Class II) and to record and measure movement of the cervical spine in 3 planes of movement (flexion-extension, lateroflexion - left-right and rotation using an ultrasound based spine investigation system (Zebris Medical GMBh) when taking a sip of water. Common patterns of movement were indicated in the 2 groups. The findings highlight the clinical usefulness of ultrasound (Zebris Medical GMBh) which could be considered relevant as a safe alternative to x-ray, CT, MRI scans giving detailed data and so realizing measured changes when working with these difficulties.

LEARNING OUTCOMES

1) To recognize the first signs of TMD in childhood.

2) To recognize features of the relationship between the function of cervical spine and TMD.

3) To recognize ongoing maladies of the cervical spine if malloclusion is not treated.

4) To learn about methods to measure the function of swallowing.

5) With clear principles identified enables clear measurements to be taken in the progression of treatment.

MULLER-HAGEDORN Silvia, Orth | GERMANY

FUNCTIONAL TREATMENT IN PATIENTS WITH PIERRE ROBIN SEQUENCE

Dr Silvia Muller-Hagedorn became an MD at the Humboldt University of Berlin (Germany) and went on to continue her studies qualifying as a Dentist in 2002 and going on to specialise in Orthodontics at the Eberhard Karls University of Tuebingen (Germany). She practiced as a Dentist from 2003-2011 and during 2010 she has volunteered as a Doctor for the German Red Cross. From the period between 2011-2017 she worked at the Department of Orthodontics & Interdisciplinary Center for Cleft Palate & Craniofacial Malformations, at Tuebingen University Hospital. From 2017-2020 she has been working at the Department of Orthodontics University Hospital of Rostock. She is keen to forge relationships fro work on research projects at the or research Department of Ophtalmology, Otolaryngology and Head and Neck Surgery, Botucatu Medical School, Sao Paulo, Brazil

ABSTRACT

Infants with Robin sequence (RS) suffer from upper airway obstruction (UAO) and feeding problems. This presentation describes a large study exploring the use of the Tuebingen Palatal Plate as a useful tool used to support patients with Pierre Robin Sequence. The Tuebingen palatal plate is a device which which covers the hard palate, alveolar ridgs and the potential cleft and has a velar extension which shifts the tongue in a more anterior position opening up the pharyngeal airway. The use of the Tuebingen Palatal Plate had proven effective in isolated cases of RS. The Tuebingen Palatal Plate used in combination with functional treatment to include Oral Myofunctional Therapy and appropriate feeding techniques was shown to be advantageous to individuals with RS effective in supporting and improving function. This presentation will give a detailed analysis and description of the study carried out.

LEARNING OUTCOMES

1) To define and identify the features associated with the Pierre Robin Sequence.

2) To describe the treatment concept with the Tuebingen palatal plate.

3) To define the advantages of treatment through the use of the Tuebingen palatal plate.

PETERSON Cynthia, PT, CSOM, CST, CEAS | USA

MEASURE TWICE, CUT ONCE: 6 KEYS TO SUCCESS FROM A "WHOLE BODY" PERSPECTIVE

Cynthia graduated from PT school in 1990. Her work has focused on head, neck and jaw disorders, breathing, airway and teaching healthy postures and rest position of the mandible to optimize health and the function of bodily systems. Cynthia is author of The TMJ Healing Plan: Ten Steps to Relieving Headaches, Neck Pain, and Jaw Disorders. Cynthia is a Certified Specialist in Orofacial Myology, Ergonomics, and Craniosacral Therapy with additional training in osteopathy, visceral manipulation, cranial and infant CST as it relates to breast feeding. A breath re-educator, Cynthia has trained in Buteyko, Restorative Breathing and Dynamic Functional Cranial Nerve Assessment, and Primal Reflex Release, Stecco fascial manipulation, dry needling, and the cold laser. Cynthia is co-investigator and creator of www.fairest.org, a published researcher who received the AAMS "Rising Star Researcher" award in 2019.

ABSTRACT

As a physical therapist toning and training tongues for 30 years to improve posture and stabilize the head, neck, jaw and airway, Cynthia is concerned by the sharp increase in frenotomies and failed releases. Some pediatricians are alarmed as highlighted in the European Journal of Pediatrics 2020 Review entitled "Primum non nocere: lingual frenotomy for breastfeeding problems, not as innocent as generally accepted". Together we can and must do better to protect patients and avoid alienating the medical professionals whom we need to embrace the vital importance of the Cranio-Facial Respiratory Complex. Cynthia will outline six keys she finds essential for optimal results with emphasis on scar remodeling, whole body postures, the autonomic nervous system and cranial nerve dysfunction.

LEARNING OUTCOMES

1) To recognize that scar tissue remodeling can take up to one year and may only regain up to 80% of it's tensile strength?

2) As medical and dental professionals dedicated to "First, Do No Harm" to learn to recognize the pieces of the inter-disciplinary puzzle that require consideration.

SATOH Mako Makoto, MD PhD | JAPAN

EVOLUTION OF CRANIOFACIAL STRUCTURE

Dr. Makoto Satoh was appointed the Professor of Sleep Medicine and the Director of Sleep Center of University of Tsukuba in April 2005 and transferred to International Institute for Integrative Sleep Medicine (IIIS:http://wpi-iiis.tsukuba.ac.jp) in April 2015. He received both his MD. and PhD from Niigata University School of Medicine. Since his involvement in research on breathing control began in the late 1980's, Dr. Satoh's interests have included the clinical and pathophysiological aspects of obstructive sleep apnea, its interaction with cardiovascular risk, as well as the mechanisms linking obesity to other disease.

ABSTRACT

The craniofacial structure of adult Homo sapiens differs from that of their close ancestors and other mammals. By this long term evolution, the adult Homo sapiens have come to have an enlarged neuro-cranium, but small facial structures impacting breathing and sleep. This is as a result of the shortening of the maxillary and mandibular bones in short term evolution linked to the progress from hunting to agricultural farming and the availability of food to support diet. The diet our ancestors ate involved needing to chew where as the modern day diet is characterized by a soft diet which requires less mastication. This presentation explores how eating habits as well as Myofunctional Therapy may be important to prevent or to reduce the effects of OSA.

LEARNING OUTCOMES

1) To identify OSA as an anatomic illness caused by evolutionary changes in the human upper respiratory tract, such as shortening of the maxillary and mandibular bones.

2) To recognize the relationship between craniofacial development and modern day eating habits.

3) To realize how eating habits may play important role in reducing symptoms of and preventing OSA.

WENG CHEU Yue, BDS, FRACDS, MJDF | SINGAPORE

WELLNESS THROUGH THE POWER OF THE TONGUE - TMD AND DENTAL SLEEP MEDICINE

Dr. Weng Cheu is the Clinical Director of DP Dental (Kovan) and DP Dental (Orchard). DP Dental group integrates dental technology for predictable diagnostic and therapeutic outcomes for patients. He completed his BDS degree at the National University of Singapore and received an annual scholarship award from the The Pierre Fauchard Academy Foundation. He has been elected as a Fellow of the Royal Australasian College of Dental Surgeons; Fellow of the International College of Dentists, and Fellow of International Congress of Oral Implantologists. He has completed the full TMD continuum at Occlusion Connections in USA and finished his mini residency on Dental Sleep Medicine with TUFTS University School of Dental Medicine. HE has been lecturing and conducting hands-on courses locally & internationally.

ABSTRACT

A presentation about the special interest in the dental approach to supporting overall health and well being. The understanding of cranial nerves and reflexes helps to integrate oral functions. Tongue function is pivotal in creating sufficient growth and development of the craniofacial respiratory complex. The tongue is crucial in managing the airflow during the day and especially at night. With a billion patients needing help with sleep-related breathing disorders, dentists are called to the frontline to provide the screening and managing support to the medical colleagues.

LEARNING OUTCOMES

1) To recognize the neural resources allocated to the stomatognathic system from birth.

2) To recognize the relationship between the tongue and the rest of the body.

3) To be familiar with combination therapies to manage TMD and SRBDs patients to include the role of non extraction-Invisalign and Myofunctional Therapy.

STECCO Antonio, MD, PhD | ITALY

PATHOPHYSIOLOGY OF FASCIA

Dr. Stecco's scientific activity is devoted to studying the human fasciae from a macroscopical, histological, and physiopathological point of view. He has personally made over 100 cadaver dissections for research purposes, and, since 2007, Dr. Stecco has organized and personally taught theoretical and practical courses about the Fascial Manipulation method on all five major continents. He is the author of more than 40 papers about the extensor in fasciae, a co-author of five books, and a co-author of several chapters of international texts published by Elsevier. Dr. Stecco co-authored with his sister, Carla Stecco, MD Fascial Manipulation for Musculoskeletal Pain. He was recently elected Assistant-President in the Cabinet of the International Society of Physical Medicine and Rehabilitation.

ABSTRACT

This comprehensive session presents knowledge emerging from the pain sciences in a clinically accessible way. It will explore the pathophysiology fascial system and the presence of quantitative, reproducible physical findings in the evaluation and management of chronic myofascial pain and dysfunction. Stiff deep fascia are common sources of persistent nociception that cause persistent nociceptive bombardment and chronic myofascial pain. Non-pharmacological treatments, like fascial manipulation will be discussed. These techniques aim to decrease fascial stiffness, normalize the threshold of nociceptors, desensitize affected segments, providing long-term pain and symptom relief. It will be presented new diagnostic methods to early diagnose myofascial pain syndrome such T1ρ mapping MR imaging and dynamic ultrasonography.

LEARNING OUTCOMES

1) To recognize the gross anatomy and histology of deep fascia (e.g., innervation, mechanical behavior), including the significance of myofascial/myotendinous expansions and its role in proprioception.

2) Describe the pathophysiology of fascia, elaborating on the concept of the myofascial sliding system and its contribution to myofascial pain syndrome.

3) An explanation of the process and rationale of clinical assessment of the deep fascia tissue as well as the therapeutic advantage provided by plasticity and malleability of fascia.

JOHNSON Virginia, DO, FAAO | USA

THE INTERRELATIONSHIP OF TONGUE POSITION AND PHYSICAL POSTURE

Virginia M. Johnson, DO, FAAO, C-NMM/OMM: Doctor of Osteopathic Medicine, 1998 College of Osteopathic Medicine of the Pacific Western University of Health Sciences, Pomona, CA. AOA Residency, Neuro-Musculoskeletal Medicine/ Osteopathic Manipulative Medicine, St. Barnabas Hospital, Bronx, New York, Hugh Ettlinger, D.O., F.A.A.O, Director, 1999–2001. AOA Board Certified in Neuro-Musculoskeletal Medicine & Osteopathic Manipulative Medicine. 2002, re-certified 2011. AOBNMM/OMM Fellowship, American Academy of Osteopathy, Conferred March, 2015. Clinical Assistant Professor, Dept. of Osteopathic Manipulative Medicine, Western University of Health Sciences, College of Osteopathic Medicine of the Pacific, 2002–present. Faculty, The Osteopathic Cranial Academy, various courses, 2003—present Faculty in OMM, PIH/Downey Medical Center, Family Medicine Residency, Downey, CA, 2016–present. Private Practice, Neuro-Musculoskeletal Medicine/Osteopathic Manipulative Medicine, Santa Monica, CA, October 2001 to present.

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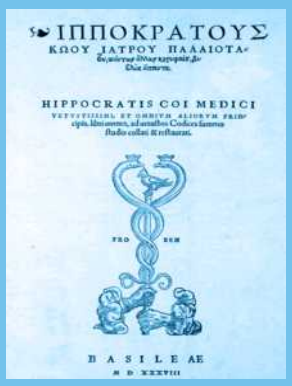
09:00 PDT LOS ANGELES, 17:00 LONDON

AN EMERGING FIELD OF MEDICINE NEEDS TO TELL ITS STORIES, CELEBRATE ITS HEROES, AND LET THEIR LIGHT SHINE UPON US ALL

Join us as we celebrate giants leading the way forward and rising stars who will change medicine as we know it! Celebrate the profound impacts of Takashi Ono, Japan, Paola Pirelli, Italy, John Mew, United Kingdom, Jean Delaire, France, Stacey Quo, USA, Darick Nordstrom, USA, Eyal Botzer, Israel, Patrick McKeown, Ireland, Macario Camacho, USA, Giedre Berretin-Felix, Brazil, Kevin Boyd, USA, and RISING STARS Karen Spruyt, France, and many others!



Join us as we change medicine!

TRACK 7

SLEEP & MYOFUNCTIONAL THERAPY

BIANCHINI Esther, SLP | BRAZIL

UPDATES ON SLEEP AND MYOFUNCTIONAL THERAPY FROM BRAZIL

Dr. Esther Mandelbaum Gonçalves Bianchini, Speech and Language Pathologist (SLP), Specialist in Orofacial Motricity (Orofacial Myofunctional Therapy – CFFa 019/96) Master in Communication Disorders (PUC-SP), received her Ph.D. in Science, Experimental Physiopathology at the Faculty of Medicine of the University of São Paulo (FMUSP). Currently, she is a permanent professor at the Post Graduation Program in SLP at the Pontifícia Universidade Católica de São Paulo (PUC-SP) and at CEFAC – Health and Education, Brazil. She is the Coordinator of the SLP Commission of the Brazilian Society of Sleep (ABSono) and directs a SLP Rehabilitation Clinic in São Paulo, Brazil. Her major interest is diagnosis and rehabilitation procedures regarding swallowing disturbances, dentofacial deformities, orthognathic surgery, sleep apnea, and temporomandibular disorders.

ABSTRACT

Obstructive sleep apnea (OSA) is a common disorder that increases the risk of metabolic and cardiovascular diseases, can be accompanied by neurocognitive sequelae, and compromises the quality of life. Recent studies reported global prevalence of OSA with almost 1 billion people affected, and with prevalence exceeding 50% in some countries. The number was highest in China, followed by the USA, Brazil, and India. Care of patients with OSA varies by country, but treatment strategies are needed to minimize the negative health impacts and to maximize cost-effectiveness. The course of studies on DRS and OMT shows promising results, but new projects will also be presented to highlight some questions that remain unanswered: who is the eligible patient, how do exercises produce effects during sleep, what are the functional effects, and mainly how to guarantee adherence to OMT.

LEARNING OUTCOMES

1) To be familiar with studies relating to Sleep Disordered Breathing (SDB) and orofacial myofunctional therapy (OMT).

2) To assess and identify structural and functional imbalances as a predictor of SDB

3) To recognize soft tissue relationships with upper airway dynamics: how and why exercises work

4) To consider a pathway of intervention for OSA patients embedded in recent scientific evidence.

ZEE Phyllis C., MD, PhD | USA

TBA

Professor in Neurology and Director of the Sleep Disorders Center at Northwestern Universitys Feinberg School of Medicine in Chicago, Illinois, where she is also Associate Director of the Center for Sleep and Circadian Biology. Dr. Zee directs an interdisciplinary clinical and research program in sleep and circadian rhythms. Research topics in this Program range from basic animal studies to therapeutic clinical trials. Basic and clinical studies from her laboratory paved the way to novel treatments for disorders associated with sleep and circadian clock dysfunction. Her research has focused on the effects of age on sleep and circadian rhythms, genetic regulation of circadian sleep disorders, and behavioral interventions to improve sleep and performance. In addition, current NIH sponsored research include studies that examine the relationship between sleep and sleep disorders with metabolic and cardiovascular risk in populations at risk, such as older adults, and the effects of sleep disturbance on adverse pregnancy outcomes. Dr. Zee also has authored more than 100 peer reviewed original articles and over 40 chapters and reviews on the topics of sleep, circadian rhythms, and sleep/wake disorders.

GELB Michael, DDS, | USA

AIRWAY CENTRIC MYOFUNCTIONAL EARLIEST ORTHODONTIC INTERVENTION

Dr. Michael Gelb, DDS, MS is a world-renowned TMJ and Sleep Specialist with practices in both New York City and White Plains. He received his D.D.S. degree from Columbia University College of Dental Medicine and his M.S. from SUNY at Buffalo School of Dental Medicine. Dr. Gelb is the co-author of GASP: Airway Health- The Hidden Path to Wellness, and the co-founder of both The Foundation for Airway Health and The American Academy of Physiological Medicine and Dentistry.The Gelb Center was founded over 30 years ago by Dr. Michael Gelb's father, Dr. Harold Gelb. Since then, Dr. Michael has taken his father's findings to the next level through his Airway Centric® integrated therapy. He invented the ACG™ Airway Centric® System with the help of ProSomnus Sleep Technologies. The ACG System is the first day and night dental appliance solution that offers an integrated approach to addressing airway issues.Dr. Michael Gelb is dedicated to improving his patients' health by reducing pain, restoring refreshing sleep and transforming lives.

ABSTRACT

Nasal disuse or mouthbreathing may begin at birth particularly in premature infants. Nasal breathing and ideal muscle tone is a fundamental key to cognitive, behavioral and psychological development as well as growth and development. Racial and social disparities put African American children at increased risk of developing and suffering from these disorders.

LEARNING OUTCOMES

1) Be able to identify upper airway collapse and instability starting at birth.

2) To recognize the value of early intervention to stabilize and develop the airway.

3) To have awareness to take action to counter the effect of racial disparity on the airway of African American children as well as its sequelae.

DE LUCCAS Gabriele, SL, MS, PhD | BRAZIL

OBSTRUCTIVE SLEEP APNEA AND OROFACIAL MYOFUNCTIONAL THERAPY: SCIENTIFIC EVIDENCE AND FUTURE PERSPECTIVES

Gabriele holds a degree in Speech-Language Pathology and Audiology and a Master's degree in Science from the University of São Paulo's Bauru School of Dentistry. She is currently a Ph.D. student at the same institution in the Speech-Language Pathology and Audiology graduate program. She is also a certified speech therapist in sleep medicine.

ABSTRACT

After the diagnosis of obstructive sleep apnea via objective and subjective exams, treatment is performed in a multidisciplinary format by a team of sleep health professionals in fields such as otorhinolaryngology, pneumology, psychiatry, nutrition, dentistry, physiotherapy, psychology, and speech therapy. The inclusion of speech therapy in the intervention team for patients with OSA is related to the presence of altered orofacial myofunctional aspects clinically found in these patients. As the dilator muscles of the upper airway collapse during sleep, studies have started to consider the use of myofunctional exercises as a treatment method for OSA. Speech therapy, through the specialty of Orofacial Motricity (MO), started developing studies to explore the topic and to prove its effectiveness as an intervention in reducing the apnea-hypopnea index, frequency and intensity of snoring, and in association with other treatment methods, such as CPAP. This lecture will aim to show the path of speech therapy and sleep medicine in Brazil, discuss the evaluation and therapeutic process in Orofacial Motricity, and present future perspectives for research in speech therapy and sleep.

LEARNING OUTCOMES

1) To define the features related to diagnosing and treating obstructive sleep apnea.

2) To have an outline the history of speech therapy in sleep medicine.

3) To be familiar with the scientific evidence on myofunctional therapy and obstructive sleep apnea.

4) To describe the objectives and main strategies for assessment and therapy in obstructive sleep apnea cases.

5) To be familiar with future future perspectives for speech therapy and sleep-related research.

KHATWA Umakanth, MD | USA

A CALL FOR UPDATES TO THE STANDARDS OF CARE FOR PEDIATRIC SLEEP: INCLUDING MYOFUNCTIONAL DISORDER SCREENING AND TREATMENT

Dr. Umakanth Khatwa, is a graduate of Karnataka Institute of Medical Sciences, Hubli, Karnataka, and completed hispediatrics residency at the All India Institute of Medical Sciences, New Delhi. He came to United States and completed his pediatric residency at The Weil Cornell Medical School, Lincoln Medical Center, New York. He went on to complete his fellowships in pediatric pulmonology at Harvard Medical School, Boston Children's Hospital and sleep medicine at Harvard Medical School, Beth Israel Deaconess Medical Center, Boston. Dr. Khatwa, is certified in pediatrics, pediatric pulmonology and sleep medicine. He is currently faculty at Harvard Medical School and actively involved in teaching medical students and residents. He is the Director of Sleep Laboratory at Boston Children hospital and co-director for Program for Sleep Apnea and Sleep Surgery and Primary Ciliary Dyskinesia Program.

MOORE Sharon, SLP | AUSTRALIA

PEDIATRIC SLEEP A GLOBAL HEALTH CHALLENGE

Sharon Moore is a speech pathologist with 4 decades of clinical experience across a wide range of functional disorders of the upper airway. She works closely with medical and dental specialists, integrating myofunctional science fully into diagnosis and treatment planning across multiple upper airway functions; breathing, swallowing, chewing, phonation, resonance, speech and airway patency during sleep. The global health challenge of pediatric sleep disorders as a global public health issue has inspired her to write Sleep-Wrecked Kids, a resource for parents and professionals.

ABSTRACT

Poor or inadequate sleep is a high-priority public health issue with ramifications for mental and physical health, performance and productivity. Collectively, the consequences of untreated sleep problems have a detrimental impact on education, health, society and economy broadly with high fiscal cost to governments globally. Children's sleep problems impact four key domains of development; physical, mental, emotional and social. The associated cumulative impacts can position these children well under their own potential and behind their peers for years, not with-standing the associated cumulative health risks. While sleep health is a serious issue, there is little public awareness and a lack of investment into public education, which has been shown to play a vital role in the improvement of other public health concerns, such as skin cancer prevention. Given the severity of this issue, public health education, standardised sleep screening and early treatment are essential measures to ensure every person and particularly every child is getting the sleep they need every night with proactive care of upper airway health and function as a top priority and the critical role of orofacial myofunctional therapy in creating 'the healthiest airway at the earliest possible age.

LEARNING OUTCOMES

1) What Australia is doing nationally to improve the sleep health of Australians, solving sleep problems across the nation.

2) Why all professionals need to screen for sleep problems and how.

3) Triaging for sleep breathing disorders: when why and how of myofunctional interventions for paediatric sleep disorders.

O'CONNOR REINA Carlos, MD | SPAIN

MYOFUNCTIONAL THERAPY IN A SLEEP UNIT. APPLICATION OF TELEMEDICINE APPROACH USING A MHEALTH APP

As an Otolaryngologist Dr Carlos O'Connor Reina main objective is to treat and diagnose sleep disorders. He qualified in 1994 with a degree in medicine from Hospital Virgen Macarena Sevilla and went on to become an otothinolaryngology Fellow. He is a graduate in Design and Statistics for Medical Sciences and a graduate in Acupuncture and Traditional Chinese medicine. He has been involved in clinical practice since 2000 and in 2006 became Head of ENT Departament form Hospital Quiron Marbella and in 2012 became also Head of ENT Department Hospital Quiron Campo de Gibraltar, Cadiz which are their current posts. He has been involved in engaging in academic study across the world, Germany, USA, UK, Italy, Brazil. He authored 14 international manuscripts 10 with an impact factor based on sleep medicine matters.He is accredited Expert Somnologist by ESRS and Sleep Medicine Specialist by SES .He is chair of the Board of the Spanish Otolarynology Society and the Spanish Sleep Society.

ABSTRACT

Success in the treatment of sleep disordered breathing using Myofunctional Therapy has been demonstrated over a 5 year period at our Hospital Sleep Units. The presentation focuses on the use of MHealth App, Airway Gym which was developed through our clinical practice and is based in myofunctional therapy. The app is able to measure patient compliance and precision in completing the exercises. The app is currently used by 3200 patients worldwide. The presentation will discuss anatomical assessment with consideration to airway obstruction including the use of sleep induced endoscopy. Tone of the muscles of the upper airway are measured through the IOPI (Iowa oral performance instrument). The AirwayGym app was used as an alternative to 1:1 Myofunctional Therapy and this presentation will discuss the practicalities of using the app and its clinical effectiveness with the first clinical trial essays. Our clinical experience of using this therapy tool, publications supporting its use and cases successfully treated with this tool will be shared.

LEARNING OUTCOMES

1) To identify the patient with sleep disordered breathing who will benefit from Myofunctional Therapy.

2) What information should we be asking our ENT specialists when to treat SDB Patients with Myofunctional Therapy.

3) How to successfully use an App based on Myofunctional Therapy with telemedicine.

PIA VILLA Maria, MD, | ITALY

SHORT LINGUAL FRENULUM AS A RISK FACTOR FOR SLEEP DISORDERED BREATHING IN SCHOOL AGED CHILDREN

Maria Pia Villa is Professor of Pediatrics and Head of Department of Pediatrics and Sleep Center at the University "Sapienza", faculty of medicine, Sant'Andrea Hospital, Rome. Since 1976 she has been involved in research associated with sleep-disordered breathing in children, pediatric pulmonology and allergy, pediatric neurology becoming an internationally recognized expert. She has written numerous scientific papers for prestigious international journals: 200 published articles.

ABSTRACT

Recent evidence has recognized the relationship of a short lingual frenulum in children with sleep-disordered breathing (SDB). The precence of a short lingual frenulum can lead to oral-facial dysmorphosis, and also increases the risk of upper airway collapsibility in sleep. This presentation describes a research study on 504 children with the aim of evaluation the presence of a short lingual frenulum as a risk factor for SDB in children of school age with and without snoring. The findings demonstrated that children with a short lingual frenulum were at significantly higher risk of a positive SCR compared to those with a frenulum of normal length. A short lingual frenulum is a risk factor for SDB. An early multidisciplinary approach and screening for SDB are indicated when this anatomical abnormality is recognized.

LEARNING OUTCOMES

1) To become familiar with recent evidence associated with the relationship of sleep disordered breathing and short lingual frenulum.

2) To recognise the interplay of a multidisciplinary approach for early detection and timely treatment of craniofacial changes and as a preventative measure for Sleep Disordered Breathing.

SULLIVAN Shannon, MD | USA

OROFACIAL DEVELOPMENT AND PEDIATRIC OSA

Dr. Shannon S. Sullivan is Medical Director of the SleepEval Research Institute in Palo Alto. She is Board Certified in Sleep Medicine, Pediatric Pulmonology, and Pediatrics. As Clinical Associate Professor at the Stanford Sleep Disorders Clinic, she evaluated and treated of patients of all ages and directed the Center's ACGME Sleep Medicine fellowship program. Dr. Sullivan has served as an appointed member of the American Academy of Sleep Medicine Transportation and Safety Task Force, the Presidential Committee on Occupational Health, and the Sleep Public Safety Committee, on which she is currently vice chair. She is recipient of a Mentor Award from the Stanford University Program in BioDesign, and recent research interests include general population epidemiology of sleep symptoms and disorders, sleep medicine education in residency and fellowship programs across the United States, and wearables for OSA screening.

ABSTRACT

Prematurity, impaired nasal breathing/ chronic oral breathing, narrow hard palate, short frenulum, and other developmental challenges to airway growth in early childhood have been associated with the development of sleep disordered breathing in childhood. Features associated with aberrant airway development and early life sleep disordered breathing will be discussed. A brief overview of assessment and treatments aimed at improving these anatomical risk factors and functional relationships will be discussed.

LEARNING OUTCOMES

1) Identify early life factors in upper airway development that may predispose to risk for pediatric sleep disordered breathing.

2) Identify history and exam features that may support suspicion for sleep disordered breathing in early childhood.

3) Overview of workup and interventions for pediatric OSA which take into consideration goals of optimal upper airway function and development.

WEBER Silke Anna Theresa, MD, PhD | BRAZIL

OROFACIAL MYOFUNCTIONAL EVALUATION: A TOOL FOR PHENOTYPING PAEDIATRIC OSA

Silke Weber, MD, PhD, Adjunct Professor for Otolaryngology and Head and Neck Surgery at Botucatu Medical School-FMB, UNESP, Botucatu,SP, Brazil. She is co-ordinator of the Sleep Lab at the university hospital Hospital das Clínicas HCFMB Botucatu and the research line in Sleep breathing disorders of the program "Surgery and Translational medicine". She is also a member of the ERS Task Force group of pediatric sleep breathing disorders.

ABSTRACT

Obstructive breathing disorders in the pediatric population is mostly underdiagnosed. Although frequently associated to hypertrophy of the tonsils, not all children will benefit from surgery. Mouth breathing is at the same time, risk factor and a consequence of abnormal function and growing of the stomatognatic system. Erroneous tongue positioning, low orofacial muscle tone are important predictors for persistence of sleep disordered breathing after surgical treatment alone. Orofacial myofunctional evaluation helps to recognize the different phenotypes of OSA children, thus, improving treatment planning and outcome.

LEARNING OUTCOMES

1) To recognise the relationship of the tongue and breathing and how this can influence craniofacial development and the pharyngeal dimension of the airway.

2) To recognise the role of the multi-disciplinary approach to treatment and have information on how to build up a multidisciplinary protocol for the evaluation and treatment of mouth breathing children. The role of each team member is considered and should include pediatricians, sleep specialists, otolaryngologists, speech language therapists and orthodontics

HRUBOS-STROM Harald, MD, PhD | NORWAY

OROFACIAL MYOFUNCTIONAL THERAPY WITH AUTOFEEDBACK IN THE HORIZON 2020 SLEEP REVOLUTION APPLICATION

Dr. Harald Hrubos-Strøm holds a position at the Department of Otorhinolaryngology, Akershus University Hospital, Norway. He is a clinician and a researcher with interest in the physiology of respiratory regulation, sleep apnoea diagnostics, and novel treatment solutions. Dr Hrubos-Strøm has an MD from the University of Bergen and a PhD from the University of Oslo. After obtaining his PhD, he has specialised in otorhinolaryngology and co-supervised one PhD student. He is currently the main supervisor of two PhD students, acting leader of the otorhinolaryngology research group at Akershus University Hospital, and associate professor (10%) at the University of Oslo, department of behavioural science in medicine. He also holds an expert certificate as a Somnologist from the European Sleep Research Society.

ABSTRACT

The "Sleep Revolution" application was submitted to the "Horizon 2020" portal on June 4th. The application is based on the NordSleep project, a current research collaboration between Reykjavik University, The University of Eastern Finland and Akershus University Hospital, Norway. The main objectives of the proposed Sleep Revolution project are: 1: To transform current diagnostic methods for obstructive sleep apnea (OSA), 2: To bring advanced sleep diagnostics from hospital into patient's home, 3: To promote participatory health care with technological solutions and 4: To develop different personalized treatment options for OSA patients.The application is based on a collaboration between 17 European countries. The effect of orofacial myofunctional therapy with autofeedback (OMTa) will be examined in work package 9 (of 12). A randomized controlled study has been designed in close collaboration between Triin Jägomagi (University of Tartu), Toril Dammen and Anne Moen (University of Oslo) and Harald Hrubos-Strøm (Akershus University Hosptial). OMT will be delivered by a PhD student trained by an experienced OMT provider to patients with mild to moderate OSA. If funded, the autofeedback technology will consist of an existing electronical sleep diary with feedback function plus an exercise diary with automatically reminder function and available instruction videos. The overall application framework and the OMTa concept is presented in the lecture.

LEARNING OUTCOMES

1) To recognize novel diagnostic methods for OSA.

2) To have an awareness of the application of technological solutions supporting participatory health care.

3) To define the concept of Orofacial Myofunctional Therapy and its application to sleep.

CAMACHO Macario, ENT | USA

THE EFFECT OF MYOFUNCTIONAL THERAPY ON SNORING AND SLEEP APNEA: AN OVERVIEW OF THE LITERATURE

Dr. Macario Camacho trained in otolaryngology at Walter Reed National Military Medical Center. Afterwards, Dr. Camacho trained for two years at Stanford University. The first year was a Sleep Surgery fellowship with Dr. Capasso, Dr. Goode, Dr. Riley and Dr. Schendel. During the second year Dr. Camacho was a Sleep Medicine fellow and trained with Dr. Guilleminault, Dr. Kushida and several others. Currently, Dr. Camacho is in Hawaii, serving in the US Army.

ABSTRACT

This presentation will discuss myofunctional therapy and how it affects sleep disordered breathing.

LEARNING OUTCOMES

1) The effect of myofunctional therapy on snoring will be discussed and summarized.

2) The effect of myofunctional therapy on obstructive sleep apnea will be discussed and summarized.

3) Recommendations will be presented for future research.

NG Daniel, FRCP | HONG KONG

COVID19 AND SLEEP MEDICINE: THE OPPORTUNITIES

Dr. Daniel K. Ng is currently the Honorary Consultant in the Department of Paediatrics, Hong Kong Sanatorium & Hospital. He served as the Consultant Paediatrician and COS in the Department of Paediatrics, Kwong Wah Hospital before coming to HKSH. He is a registered specialist in pediatric respiratory medicine. His interest in pediatric respiratory medicine started in 1992 and he received further training in this area in the Hospital for Sick Children, Toronto. He was awarded Master of Medical Sciences by the University of Hong Kong for his works in neonatology in 1999. He received training in pediatric sleep medicine in Stanford University Sleep Disorders Center and started the pediatric sleep service in Kwong Wah Hospital. For his research works in pediatric sleep-disordered breathing, he was awarded Doctor of Medicine by the University of Hong Kong. Dr. Ng was awarded European Diploma in Pediatric Respiratory Medicine by European Respiratory Society and Specialist in Sleep Medicine by World Association of Sleep Medicine. Dr. Ng's main research interests are sleep-disordered breathing, asthma and allergic rhinitis.

ABSTRACT

COVID-19 is all the rage with no end in sight. It is changing the landscape of medicine rapidly as patients are avoiding the medical establishment for fear of being infected with SARS-CoV-2. For medical services outside of COVID to continue, a shift to telemedicine is essential to providing care to patients who would otherwise have no access. Patients with sleep problems like sleep-disordered breathing (SDB) would be ideal to be managed in a telemedicine setting as the problems are not acute. For the diagnosis of SDB, it can now be done with a very user-friendly machine with complex technology allowing patients to put it on themselves after watching a video and the real-time check of the qualities of signals done remotely. The results and the consultation can be done remotely. Treatments of SDB include surgery, dental intervention, medical treatment of allergic rhinitis, orofacial myofunctional therapy and non-invasive ventilation. As surgery and dental intervention would require attendance in hospitals which are overflowing with COVID-19 patients, it is likely that a lot of patients would have no access to these treatments. The void could be filled in remote management to include the medical consultation and treatment; NIV (Non invasive ventilation) and OMT. It is imperative for sleep medicine practitioners to set up the necessary hardware and software that allow this telemedicine to take place.

DEWALD Denise, MD | USA

THE ROLE OF THE SOFT PALATE IN OBSTRUCTIVE SLEEP APNEA

Dr. Dewald received her MD degree from Washington University School of Medicine and completed a combined internal medicine/pediatrics residency at the University of Illinois in Chicago. Inspired to understand why her toddler had severe OSA that did not respond to adenotonsillectomy, she trained in myofunctional therapy with Joy Moeller, and eventually left primary care to pursue sleep medicine research. She completed sleep medicine fellowship at Case Western Reserve University in Cleveland, Ohio, and remains there on a research fellowship focusing on the neuromuscular patterns underlying OSA. Research goals are to improve OSA treatment and prevent development of OSA in the first place.

ABSTRACT

The soft palate plays a pivotal role in upper airway stability in health, and collapse in OSA. The soft palate evolved to enable suckling, a motor pattern unique to mammals. Breastfeeding lays the foundation for normal oromotor movement patterns early in life. Artificial infant feeding methods may alter the coordination of the tongue and soft palate, and allow for the development of varied swallowing patterns that may ultimately be dysfunctional. Understanding normal soft palate function in suckling, breathing, and the normal adult swallow is critical for the development of myofunctional rehabilitation strategies aimed at promoting nasal breathing and treating OSA.

LEARNING OUTCOMES

1) To identify how the soft palate participates in upper airway collapse during sleep.

2) To define the role of the individual muscles of the soft palate affect the combined airway and foodway.

3) To define the role of myofunctional therapy in supporting the muscles of the pharynx.

CASTRO CORREA Camilla, SLP, PhD | BRAZIL

PEDIATRIC OBSTRUCTIVE SLEEP APNEA AND COMMUNICATION DISORDERS

Camila de Castro Corrêa, Speech and Language Pathologist (SLP - University of São Paulo 2010), Master's degree by University of São Paulo (2014), PhD by Botucatu Medical School - UNESP (2019) and Sapienza Università di Roma. Currently, she is an Professor University of Brasília (UnB) and Plateau University Center of the Federal District (UNIPLAN), Brasília, Distrito Federal, Brazil. She is author of several papers about orofacial motricity, sleep and telemedicine. She is certified in Speech-Language Pathology of Sleep Medicine by Brazilian Sleep Association (ABS), and she is a member of ABS Council.

ABSTRACT

Cognitive processes develop exponentially in childhood, making this phase decisive for the acquisition and development of communicative skills. This presentation will bring the findings of receptive and expressive communication skills in the pediatric population with obstructive sleep apnea, including the influence of muscles and orofacial functions for communication.

LEARNING OUTCOMES

1) To recognize the relationship of communication disorders and obstructive sleep apnea, specifically topics of language, speech and hearing.

2) To identify the relationship between the muscles of orofacial functions for communication and pediatric obstructive sleep apnea.

3)To identify the Speech-Language Pathologist role to improve the screening of children at risk for sleep disorders.

RIVERA Eliana , SLP | BRAZIL

OROFACIAL MYOFUNCTIONAL THERAPY TO TREAT OBSTRUCTIVE SLEEP APNEA BY TELECARE

Speech and Language Pathology - SLP, Master's in Quality Management in Higher Education, Specialist in Clinical Auditing, Fellowship in the Orofacial Myology, dysphagia and Voice specializations at the CEFAC Saúde – Educação of São Paulo - Brazil. Full-time professor at the Speech and Language Pathology Department at the Universidad de Pamplona (Colombia) and co-founder of the Speech and Language Pathology program, the Human Communication research group, and the journal "Signos Fónicos" (Phonemic Signs). Speech and Language Pathology Doctorate student at the Universidad del Museo Social Argentino – UMSA, co-funded by the (Universidad de Pamplona). Researcher for the efficacy of Orofacial Myofunctional Therapy to treat Obstructive Sleep Apnea and Chronic Snoring.

ABSTRACT

Studies aimed at demonstrating the efficacy of Orofacial Myofunctional Therapy - OMT in patients with Obstructive Sleep Apnea, mainly and in patients with snoring, indicate that OMT is a treatment option with interesting results in reducing the severity of OSA especially moderate (1) (2) (3) (4) (5), decreasing intensity and frequency of snoring, daytime sleepiness decrease, increased oxygen saturation and more restful sleep perception. In addition, it can also be considered as an adjunct in increasing the number of hours and comfort in the use of CPAP (6); however, few investigations have focused on the identification on which patient diagnosed with OSA is ideal for treatment by OMT. This conference presents the experience in the treatment of patients with Obstructive Sleep Apnea and snoring with Orofacial Myofunctional Therapy - OMT using Telecare in a pulmonology and sleep clinic located in the city of Medellín - Colombia; Additionally, we present the development of the OMT service using a logic of data architecture and an Artificial Intelligence, which have helped to outline the ideal type of patient for TMO in OSA.

LEARNING OUTCOMES

1) Explain what can and cannot be done through Telecare in Orofacial Myofunctional Therapy to treat OSA.

2) To present the results after three months of treatment of patients with OSA and snoring, through Tele-assisted Orofacial Myofunctional Therapy.

3) Propose ways for the development of an Orofacial Myofunctional Therapy service based on data architecture and Artificial Intelligence -IA.

BOYD Kevin, DDS, MSc | USA

RECURRENT SLEEP RELATED BREATHING DISORDER AFTER TONSILLECTOMY AND ADENOIDECTOMY

Board certified Pediatric Dentist in Chicago who also holds a Master's degree in Human Nutrition and Dietetics. He teaches in the Pediatric Dentistry residency program at Lurie Children's Hospital and serves as a dental consultant to their sleep medicine clinic. Dr. Boyd is a visiting scholar at the University of Pennsylvania Museum of Archeology and Anthropology conducting research in post-industrial evolution of the human face and airway-related structures. He lectures worldwide on pediatric OSA, evolutionary oral medicine and early intervention orthodontics.

ABSTRACT

Post-surgical SRBD symptom recurrence is often described as both a short-term and long-term problem; and according to the late Christian Guilleminault, 'it appears that we cannot assume that T&A alone can be relied upon to sufficiently restore normal breathing during sleep. Nasal breathing during wake and sleep is the demonstration of normal respiratory functioning in a child, and persistence of mouth breathing is an indicator for the need for further treatment of sleep-disordered breathing'. Published reports dating from the late 19 th/early 20th-Centuries also describe the frequency of recurrent SRBD as a common post-adenotonsillectomy morbidity.

Unhealthy body weight in growing children is often associated with increased risk for development of various systemic co-morbidities, such as cardiovascular disease, Type 2 diabetes and hypertension, etc.; additionally, pediatric overweight can contribute to pathophysiology of SRBD through increased fat deposition within the lateral pharyngeal walls, tongue and soft palate. Another set of morphological risk indicator traits with co-morbidity and known persistence capability beyond early childhood (less than 71 months/age 6), are specific maldevelopments of the interconnected craniofacial and respiratory complexes (CFRC-Figure 1). Often casually referred to in the scientific literature as being minor, or incipient malocclusions, such as constricted transverse jaw dimension, deep and narrow palatal vaults, retrusive chins and/or mid-faces, steep mandibular planes/vertical direction of craniofacial growth. These so-called minor malocclusion traits, are also often reported as being frequently associated with SDB co-morbidity in childhood, and usually beyond in the absence of appropriately timed and applied orthodontic/dentofacial orthopedic intervention.

To date, as there are no known published studies that clearly establish any direct causal relationship between abnormal respiratory events during wakefulness and sleep and specific mild malocclusion. Accordingly, the American Orthodontic Association continues their ongoing recommendation that children should receive their first orthodontic evaluation 'no later than age 7', and further report in promotional material that '…orthodontic treatment most often begins between the ages of 9 and 14'. This presentation will attempt to make an argument for why the above listed specific malocclusion traits should indeed be identified, and paired with a validated SRBD risk assessment tool, under the age of 71 months/6 years.

LEARNING OUTCOMES

1) To describe adenotonsillectomy and sole adenoidectomy as surgical procedures that seldom results in complete long-term resolution of pediatric sleep-related breathing disorder(SRBD).

2) To show that adeno-tonsillar hypertrophy (ATH) is only one factor that contributes to etiology of pharyngeal crowding and consequential nasal disuse and habitual mouth breathing; other etiological factors include fat deposition within the tongue, soft palate and lateral pharynx, and also retro-positioning of the mandible and/or maxilla.

3) To demonstrate that, children afflicted with severe-early childhood malocclusion (SRBD with comorbid retrognathia and/or transverse deficiency of the mandible and/or maxilla before age 71 months) can often experience mitigation of SRBD-related behavioral traits coincident with expansion and protraction of narrow/retrusive jaws and faces.

4) To reveal that the 'spreading of the deciduous dental arches' in cases of what is here described as severe-Early Childhood Malocclusion, had often been described within pre-WW II (late 19th-/early 20th-Centuries) medical and dental literature as a therapeutic strategy for children who were afflicted with naso-respiratory compromise (nasal disuse, habitual mouth-breathing, etc.) and hearing loss, etc.; and also reported to have improved post-surgical outcomes of pediatric adenoidectomy.

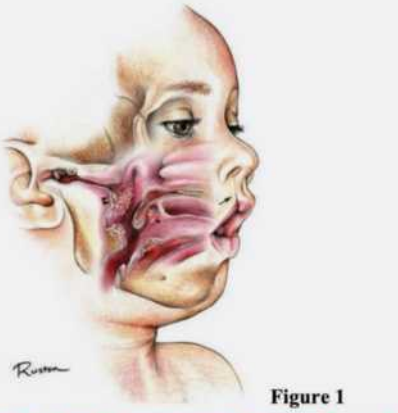


Figure 1
The Cranio-Facial-Respiratory Complex (CFRC)

TRACK 8

NUTRITION, CHEWING, & SYSTEMIC HEALTH

LUSTIG Robert, MD | USA

OBSTRUCTIVE SLEEP APNEA AND METABOLIC SYNDROME. IS IT REALLY ABOUT OBESITY

Robert H. Lustig is Professor emeritus of Pediatrics, Division of Endocrinology at the University of California, San Francisco (UCSF). He specializes in the field of neuroendocrinology, with an emphasis on the regulation of energy balance by the central nervous system. His research and clinical practice has focused on childhood obesity and diabetes. Dr. Lustig holds a Bachelor's in Science from MIT, a Doctorate in Medicine from Cornell University. Medical College, and a Master's of Studies in Law from U.C. Hastings College of the Law. Dr. Lustig has fostered a global discussion of metabolic health and nutrition, exposing some of the leading myths that underlie the current pandemic of diet-related disease.

ABSTRACT

Metabolic syndrome (Type 2 diabetes, dyslipidemia, hypertension, cardiovascular disease, and fatty liver disease) is increasing in prevalence globally. The same is true for obstructive sleep apnea (OSA), which is linked to metabolic syndrome. It has been assumed that obesity is the mediator that links these two processes. Two-thirds of OSA patients are obese, and 40% of obese patients have OSA. Many normal weight people have both OSA and metabolic syndrome and an increased waist circumference, which is a risk factor on its own. The reason is that instead of one fat depot in metabolic syndrome, there are three; subcutaneous fat, visceral fat and liver fat.

In our current high calorie, high stress, high sugar society, treatment of either metabolic syndrome or OSA is difficult; but when therapy is directed at the correct pathology, it is possible to treat and even reverse both. This presentation discusses this topic.

LEARNING OUTCOMES

1) To describe the effect of fluoride on cariogenesis, and its role as adjunct vs. primary prevention.

2) To identify how subcellular energy overload drives insulin resistance.

3) To identify the differences and similarities between hepatic glucose vs. ethanol vs. fructose metabolism.

4) To recognise classes of lipids, their role in cardiovascular disease, to include dietary components. To explain the differences between subcutaneous fat, visceral fat, and liver fat in fomenting chronic disease

• To explain the regulation of each of the three fat compartments

• To explain how the American lifestyle/diet contributes to each of the three compartments

MOORE Sharon, SLP | AUSTRALIA

THE 'FORGOTTEN ART' OF CHEWING', NATURE'S PERFECT TOOL FOR OPTIMIZING CRANIO-FACIAL GROWTH

Sharon Moore is a speech pathologist with 4 decades of clinical experience across a wide range of functional disorders of the upper airway. She works closely with medical and dental specialists, integrating myofunctional science fully into diagnosis and treatment planning across multiple upper airway functions; breathing, swallowing, chewing, phonation, resonance, speech and airway patency during sleep. The global health challenge of paediatric sleep disorders as a global public health issue has inspired her to write Sleep-Wrecked Kids, a resource for parents and professionals.

ABSTRACT

Chewing through-out life particularly in the early years of craniofacial growth, plays a key role in upper airway health and development and sleep health. The art and daily habit of chewing has progressively diminished over time, in some cases dissolved. Chewing, a much under-rated and under-recognised bodily function is a key biomechanical system that stabilises the orofacial-pharyngeal system, has links to brain and digestive system, promotes periodontal health and craniofacial growth to genomic potential. Normalising and optimising chewing is a key clinical goal for any health practitioner managing disorders of the upper airway.

LEARNING OUTCOMES

1) The critical health benefits of chewing including historical and anthropological perspectives.

2) Morphology and physiology of chewing with multi-system links including neural and digestive systems.

3) Clinical models for re-patterning dysfunctional chewing.

CANNON Mark, DDS, MS | USA

GASPING FOR LIFE

Mark L. Cannon is a Professor of Otolaryngology, Division of Dentistry at Northwestern University, Feinberg School of Medicine, an Attending Physician at Ann and Robert Lurie Children's Hospital and a member of the International Association of Pediatric Dentistry. In addition to being the founder of Associated Dental Specialists of Long Grove (1981); he is the Research Coordinator of the Pediatric Dental residency program at Ann and Robert Lurie Children's Hospital, Chicago, Illinois. Dr. Cannon has 40 years of experience in pediatric dentistry and has presented lectures both nationally and internationally. He lectures on many oral health topics including evolutionary oral medicine, the gateway microbiomes, biologic and bioactive dental materials (patents owner), probiotics, and all aspects of everyday Pediatric oral health. Dr. Cannon has humbly accepted two invitations by the Karolinska Institute, first to the Nobel Forum (2016) and secondly to the Nobel Assembly (2017).

ABSTRACT

"Whenever I feel blue, I start breathing again."- L. Frank Baum
Breathing is essential for life, and yet somehow our understanding of its importance in the young is relegated to an afterthought. All published research reaffirms the great importance of airway patency for the normal development of the child. This basic research that prompts early intervention will be explored, along with a description of clinical techniques, including but not limited to appliance therapy, in treating oral and airway issues. Most importantly, the effect of the airway on the microbiome, neurological development, and systemic health (and their inter-relationships) will be discussed. As an interesting twist, the microbiome effect on the airway will additionally be explained, somewhat like the "circle of life" concept. Special clinical cases will be presented, especially concerning young patients presenting with systemic symptoms.

LEARNING OUTCOMES

1) To recognize the importance of evolution on airway development.

2) To identify the origins of airway constriction and the effect of diet/ microbiome.

3) To outline considerations fro a protocol for early orthodontic/orthopedic interventions.

SEMONICK Christina, M.S., R.SLP, CCC-SLP | USA

WHAT MYOFUNCTIONAL THERAPISTS CAN LEARN FROM DYSPHAGIA RESEARCH

Christina graduated from the University of Alberta in Edmonton, Canada in 2012 with an M.S. in Speech-Language Pathology. She holds a certificate of clinical competence (CCC-SLP) from the American Speech-Language Hearing Association (ASHA). She is licensed by the state of California and the province of Alberta to practice Speech-Language Pathology.

ABSTRACT

Oral stage dysfunction is a feature of myofunctional disorder and remediation requires supporting the development of oral resting postures which in turn influences swallow function. There is a wealth of research on dysphagia, or swallowing disorders, which specifically targets the oral and suprahyoid musculature. We will review the research and evidence-based practice from dysphagia and consider its application to the treatment of orofacial myofunctional and sleep disordered breathing populations.

LEARNING OUTCOMES

1) To be able to recognize dysfunction of the oral stage of the eating and drinking process.

2) To be able to identify the common features of oral stage dysphagia and sleep disordered breathing.

3) To be able to apply evidence-based treatment techniques from dysphagia therapy to a clinical population.

PASKAY Licia, SLP | USA

Licia graduated from Padua University (Italy) in speech therapy, from Antioch University, Los Angeles with a BA in Gerontology and from Cal. State U. Northridge with a Masters Degree in Communication Disorders and Sciences, but she never stopped learning and pursuing education. She found the perfect mixture of inspiring professionals at the Academy of Orofacial myofunctional therapy (AOMT) where she is currently a board member. Licia shares her passion for knowledge and information by presenting at various events nationally and internationally, using different types of media. She also ponders over every word she writes in several articles on the subject of myofunctional therapy. Licia works hard but also makes a point to spend quality time with her siblings, with her much adored husband, her funny dog, friends, colleagues, students and with people passionate about learning and doing.

PRESENTATION #1

CHEWING AND RECOVERY AFTER SURGERY

ABSTRACT

Chewing in general has been linked with the growth and development of the orofacial complex, with optimal dental occlusion and optimal orofacial muscular function, stress reduction, pain reduction and with overall wellbeing. In recent years chewing gum, being easily standardized, has been used in hundreds of studies exploring the impact of chewing in many health conditions, but especially in surgery. This presentation will review some of the neurophysiological principles of chewing and digestion and review surprising, promising and well established applications of chewing in various types of surgeries The results of these studies have multidisciplinary implications and could probably usher a new standard of care regarding post surgery patients' care, to reduce complications, speed up recovery and reduce hospitalization costs.

LEARNING OUTCOMES

1) Review of the neuro-physiological principles of chewing and digestion.

2) Review current and relevant literature regarding chewing after various types of surgery.

3) Design a multidisciplinary approach to patients undergoing surgery.

PRESENTATION #2

THE ROLE OF CHEWING IN SPACE EXPLORATION

ABSTRACT

Foods to be consumed in microgravity have been refined and selected based on nutritional value and physical characteristics such as: chemical stability in extreme temperatures and in a microwave, cohesiveness or absence of crumbs. Other food characteristics have been either an afterthought or they have been improved with more frequent and longer stays of astronauts in the International Space Station (ISS). However, as humans are, and will be, spending more and more time in microgravity and plans of spending years in space (zero gravity) are closer to become a reality, food will become even more a front and center issue in many ways.Astronauts have been knowing for a long time that microgravity causes osteoporosis and muscle wasting, unless rigorous physical exercise is performed daily. Yet, virtually no studies have been published and available on the importance of maintaining the orofacial muscles' proper tone. Yet, these muscles affect directly the health of the mandibular bone, which anchors all the muscles responsible for breathing. It would be wise, considering longer time spent in micro or zero gravity to include increased chewing or a sham chewing regimen to maintain the tone of the orofacial muscles and the integrity of the jaw bone.

LEARNING OUTCOMES

1) Review the characteristics of food to be consumed by astronauts.

2) Analyze the changes in orofacial muscle physiology and functions in microgravity.

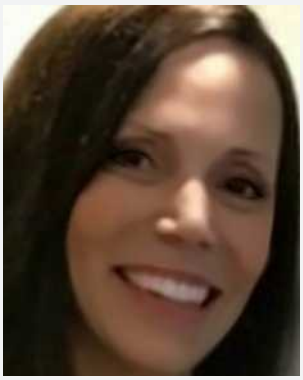
3) Suggest ideas to incorporate proper chewing into astronauts' routine for current and future space exploration.

TRACK 9

THE MULTIDISCIPLINARY TEAM, OMT, & CLINICAL CARE

ARCHAMBAULT Nicole, EdS, MS, CCC-SLP, CLEC | USA

Nicole Archambault is an ASHA board certified speech-language pathologist, certified lactation educator-counselor, and airway/sleep literacy advocate. She is the founder and executive director of Minds In Motion and has served as a teaching assistant at Johns Hopkins University in the Graduate School of Education's Mind, Brain, and Teaching program. In addition to obtaining BA and MS degrees in Speech & Hearing Sciences, Nicole also holds an EdS in brain research (Educational Neuroscience). She is currently the Secretary for the Academy of Applied Myofunctional Sciences (AAMS) and is the myofunctional therapy Section Leader for the AAPMD. Nicole is an eight-time recipient of the ACE award from ASHA. She is a national and international speaker, as well as a published author on the topics of educational neuroscience, orofacial myofunctional therapy, airway function disorders and the autonomic nervous system, and sleep wellness in pediatrics.



ROBBINS Hila, DDS | USA

Dr. Hila Robbins is a highly experienced, board-certified specialist in pediatric dentistry. She received her D.M.D. degree from the University of Pennsylvania School of Dental Medicine and completed a two-year fellowship at the Children's Hospital of Philadelphia. She completed her specialty residency at the UCLA School of Dentistry and the UCLA Center for the Health Sciences. Dr. Robbins is a Diplomate of the American Board of Pediatric Dentistry, and is a member of the American Dental Association, the American Academy of Pediatric Dentistry, the California Dental Association and the Southern California Society of Pediatric Dentistry. She is also past president and a member of the Executive Committee of the Southern California Chapter of the ASPD.

MITCHELL Marielly, OTD, OTR/L, SIPT, SWC | USA

Dr. Marielly Mitchell, OTD, OTR/L, SIPT, SWC attended Loyola Marymount University majoring in Psychology with a minor in studio arts. A fascination with the mind and body connection from childhood led her to occupational therapy. She graduated with her Master's in 2011 and in 2012 completed her Doctorate with a teacher's aid scholarship from the top ranked occupational therapy program at the University of Southern California. Her curiosity led her to further her studies in sensory processing and become certified. She also focused her training on helping children with feeding and swallowing disorders which led to an Advanced Practice Certification in Swallowing Assessment, Evaluation, or Intervention (SWC) and studied OMT broadening her knowledge base to help children with oral motor challenges, feeding difficulties, and facilitating optimal closed mouth breathing.

PRESCRIPTION FOR PLAY: FOSTERING CHILDREN'S PLAY AND RELATED FUNCTIONS IN RESPONSE TO COVID-19

ABSTRACT

For children, play is a vital part of childhood. Research demonstrates that beyond pleasure, play optimizes neurological, physical, autonomic, and behavioral development. With children's increasingly sedentary lifestyles and lack of play particularly during the COVID-19 pandemic, their overall growth and development and daytime and nighttime autonomic functions are at further risk of being compromised. Through research and clinical application, this session will bridge the importance of how play can prevent airway, breathing, sleep, postural, and oral dysfunctions when social distancing measures are in place.

LEARNING OUTCOMES

1) Identify at least 3 risk factors and/or barriers for children's lack of play in today's society.

2) Describe 3 benefits of gross motor, sensory motor, and fine motor play as foundations for optimal airway and oral function as they relate to the craniofacial respiratory complex.

3) Describe at least 3 indoor and outdoor play activities that promote optimal airway and oral functions in the developing child.

MOELLER Joy, BS, RDH | USA

MYOFUNCTIONAL THERAPY FOR THE ORTHODONTIC PATIENT: BUILDING A COLLABORATIVE TEAM

Joy Moeller, BS, RDH is a dental hygienist, formally an associate professor at Indiana University, who has worked as a myofunctional therapist for many years and currently has a private practice in Pacific Palisades and Beverly Hills. Myofunctional therapy has now been proven to be effective in reducing AHI numbers by 50% in adults and 62% in children as well as lower oxygen saturation, snoring and sleepiness outcomes improve. Joy is founding lecturer with the Academy of Orofacial Myofunctional Therapy (AOMT). She is currently on the board of the American Academy of Physiologic Medicine and Dentistry (AAPMD), a multi-disciplinary medical and dental group interested in airway problems, where she received a life-time achievement award March of 2015. She currently teaches with the Palo Alto school of sleep medicine and taught with UCLA dental sleep post-graduate program as well as a guest speaker at USC Dental Hygiene program.

ABSTRACT

Collaboration for treatment planning with a patient and practitioners many times is difficult because it requires experience and education beyond what we have learned in our training. This lecture will discuss, using current research, case studies and critical thinking modalities to assist the practitioner to develop collaborative pathways, using precision medicine, to achieve the best result possible for their patients with myofunctional disorders.

LEARNING OUTCOMES

1) To identify the features of why patients may be failing at their treatment plan

2) To recognise the different approaches to professional collaboration to identify and eliminate obstacles which may be interfering with patient successes.

3) To have awareness to the importance of patient education to balance health and to identify a patient's role in taking responsibility for their own wellness.

4) To define causes of relapse in a patient's progress and consider alternative approaches for higher levels of success.

McINTOSH David, ENT | AUSTRALIA

CONNECTING THE DOCS

"Dr David McIntosh is an adjunct Associate Professor of ENT in Queensland, Australia. He specialises in paediatric ENT, nose and sinus disease, snoring and sleep apnoea. He is an internationally recognised specialist in the field of the interplay between ENT and dentistry. He is the founder of one of the largest education services in the world for dental professionals and doctors on ENT. He also runs the online Facebook pages ""ENT for dental practitioners"" and ""ENT updates for the GP" He is the holder of a PhD, paediatric subspecialty qualifications, and has been a recipient of a NHMRC scholarship. David brought his knowledge together in a self-published book "Snored to Death" and this has been sold to countries across the world. Outside of medicine, David is also a certified fitness instructor and avid world explorer."

ABSTRACT

There is a significant relationship betwen airway problems and general health conditions. Medical doctors in their assessment and diagnosis are always at risk of overlooking the impact of dental and oral health. This presentation will highlight why it is essential that a a collaborative approach is taken to assessing and managing airway problems.

LEARNING OUTCOMES

1) To recognise the interrelated health conditions associated with sleep disordered breathing.

2) To identify the clinical signs that should alert the clinician to the possibility of sleep disordered breathing.

3) To recognise the relevance of working in a joined up multi-disciplinary way for the management and care of patients with sleep disordered breathing.

CRUZ Mark, DDS | USA

Mark A Cruz graduated from the UCLA School of Dentistry in 1986 and started a dental practice in Monarch Beach, CA upon graduation. He has lectured nationally and internationally and is a member of various dental organizations including the AAGO, NAAFO, Pacific Coast Society for Prosthodontics and the American Academy of Restorative Dentistry. He was a part-time lecturer at UCLA and member of the faculty group practice and was past assistant director of the UCLA Center for Esthetic Dentistry. He has served on the National institute of Health/NIDCR (National Institute of Dental & Craniofacial Research) Grant review Committee in Washington D.C., the DSMB (data safety management board) for the NPBRN (national practice-based research network overseen by the NIDCR) as well as the editorial board for the Journal of Evidence Based Dental Practice (Elsevier).

RAPHAEL Barry, DMD | USA

Barry is an orthodontic specialist who is the owner of the Center for Integrative Orthodontics and the Center for Integrative Education, the East Coast (USA) home of the Airway Collaborative, which he co-directs with Mark Cruz. His concentration on airway-focused orthodontics came late in his career but has dramatically changed the way he practices orthodontics. He teaches these concepts at the Mt. Sinai School of Medicine in New York City, on the national and international lecture circuit and at the Center. Barry is a Past-President of the New Jersey Association of Orthodontists. He is active with the American Academy of Physiological Medicine & Dentistry. He also the board for the AAO Donated Orthodontic Services program

ROBLEE Rick, DDS, MS | USA

Dr. Roblee practiced general restorative dentistry in Dallas, Texas before going back to study graduate orthodontics at Baylor College of Dentistry. He is recognized worldwide for his work in esthetic dentistry, orthodontic techniques and interdisciplinary therapy. He has given more than 500 professional presentations worldwide. He is a Diplomate of the American Board of Orthodontics. He is the author of numerous publications and videos, including a textbook entitled “Interdisciplinary Dentofacial Therapy: A Comprehensive Approach to Optimal Patient Care” (Quintessence Publishing Co., Inc.). For over 20 years he was an associate clinical professor at Baylor College of Dentistry in both the restorative and the orthodontic departments and is an active member in numerous prestigious dental organizations, including the American Academy of Fixed Prosthodontics, the American Academy of Restorative Dentistry and the American Academy of Esthetic Dentistry of which Dr. Roblee is a Past President.

A FRAMEWORK FOR INTERDISCIPLINARY CARE IN AIRWAY DENTISTRY

ABSTRACT

Looking for the root cause of dental pathology means looking beyond the teeth for the compensations and imbalances that trigger them. Treating “wholistically” means not only treating the teeth attached to the person but also the person attached to the teeth. Given our siloed way of educating practitioners and defining practice boundaries, we are forced to look beyond our specialty’s particular set of symptoms and at the very least screen for signs of problems elsewhere in the body. We are also compelled to collaborate with others to give the most comprehensive care. In the past, “interdisciplinary” has meant passing the patient from one practice to another in the hopes of getting all the relevant etiologies addressed. However, this approach, too, leaves gaps in care if practitioners on the team don’t talk to each other or understand each others’ fields. True interdisciplinary care requires a collaborative approach to treatment planning as well as treatment. And though it requires time and communication that is currently undervalued by patients and payors alike, building and melding a true team, often in different locations, is the challenge we now face. This track will give you an idea of the innovative ways in which practitioners are meeting this challenge. Three dentists - a restorative dentist and two orthodontic specialists from the US - discuss their protocols for running airway-related interdisciplinary teams in child and adult cases. (Joint presentation with Rick Roblee, Mark Cruz and Barry Raphael)

LEARNING OUTCOMES

1) To recognise and demonstrate awareness to the 3 domains of etiology in every airway case.

2) To identify methods of the of remote team working and record sharing using internet systems.

3) To realise the significance of assessment of medical metrics in dental cases.

FRAZÃO Yasmin, | BRAZIL

A FACIAL AESTHETICS APPROACH TO LESSEN THE NATURAL PROGRESSION OF SIGNS OF AN AGING FACE

Yasmin Frazao is a Speech and Language Pathologist (SLP) in Brazil and a Specialist in Orofacial Motricity (Orofacial Myofunctional Therapy - CFFa 2-3933); she holds an M.A. in Communication Disorders (PUC-Catholic University of Sao Paulo - 1996) and a Graduate Certificate in Orofacial Motricity - Facial Aesthetics – CEFAC (2006-2007). She is also a Speech Language Pathologist Certified in Sleep Medicine - Brazilian Sleep Association (ABS). Currently, she is completing her doctorate at the University of Sao Paulo – Bauru School of Dentistry (FOB/USP).

ABSTRACT

As we age, our skin, muscles, bones, fat and facial ligaments undergo many structural and physiological changes. Changes in one layer of tissue result in changes in all layers of tissue. To correct the damage caused by these changes, dermatologists and plastic surgeons conventionally make interventions which can vary in invasive intensity, in order to reduce pronounced contraction of the facial mimetic muscles. However, as this presentation will make clear, speech-hearing-language therapists can adopt an alternative approach, consisting of non-invasive interventions, to ameliorate these structural losses. In this talk, I will outline the basic principles of speech-hearing-language therapy for the improvement of facial aesthetics which have been the bases for my academic research and for my clinical practice. For my doctorate I developed a therapeutic program based on Orofacial Motricity in which myofunctional training of the mastication, swallowing and facial mimetic muscle patterns is associated with isotonic and isometric exercises of specific facial muscles. I will explain the possibilities of this therapy whose objective is to mitigate, not eliminate, the wrinkles and progressive signs of an aging face.

LEARNING OUTCOMES

1) To recognise the relationship between orofacial movement patterns that occur during mastication, swallowing and the action of facial expressions and the appearance of lines and wrinkles.

2) To recognise and identify with the importance of photographic and film records in order to document precise comparisons between the initial evaluation of the client's condition and the final outcome of the treatment.

3) To be able to describe the therapeutic aesthetic approach based solely on muscle activation and stimulation which lessens signs of facial aging.

FUNG Brigitte, PT | HONG KONG

DEVELOPMENT OF TELECARE IN A MYOFUNCTIONAL THERAPY PROGRAM IN HONG KONG

Ms. Brigitte FUNG is the Senior Physiotherapist at Kwong Wah Hospital in Hong Kong. She was awarded the Master of Exercise and Nutrition Science at Chester University. She is also a Certified Lymphatic Drainage Therapist, Orofacial Myofunctional Therapist and Butekyo Practioner. She is accredited to use acupuncture in her practice. In 2016, she was awarded the AAMS Rising Star Researcher Award by the Academy of Applied Myofunctional Sciences for the recognition of the contribution to the evidence based practice of Orofacial Myofunctional Therapy. She had participated in a number of research studies and position papers on myofunctional therapy.

ABSTRACT

Patients failed to attend their face to face myofunctional therapy sessions due to the COVID19 pandemic. To minimise the interruption of treatment during this pandemic, a structured Telecare Program for myofunctional therapy for sleep disordered patients was developed with therapy programmes being taken online and face to face contact via a mobile phone. Therapeutic exercises were prescribed and carried out via interaction and engagement on phone. Exercise compliance rates were investigated together with non-compliance rates and effects on therapeutic progress. Based on the findings and experiences of Teletherapy a Model of Care for Practice is discussed.

LEARNING OUTCOMES

1) To demonstrate efficacy of using telecare in the application of myofunctional therapy.

2) To explore and consider alternative methods to improve patient compliance.

3) To identify key factors for improving the self- efficacy of SDB patients in performing myofunctional therapy.

KOTLOW Larry, DDS | USA

THE MERGING OF MEDICINE AND DENTISTRY

Dr. Kotlow is recognized nationally and internationally as an expert in the field of pediatric dentistry and laser dentistry. He speaks on pediatric oral care and on the use of lasers for treating all dental conditions, especially in newborns and infants. He is one of the few dentists recognized by the Academy of Laser Dentistry to certify other dentists in standard proficiency to use lasers and has achieved the position of Mastership status from the Academy of Laser Dentistry. He presented at the The Academy of Laser Dentistry, The American Academy of Pediatric Dentistry, and The American College of Dentists. He presented courses and seminars in Sydney, Melbourne, Perth and Brisbane, Australia; Taipei, Taiwan; Tel Aviv and Jerusalem, Israel; and Edmonton, Toronto, Canada.

LEARNING OUTCOMES

1) Why the Medical and Dental Professions need to begin to work together to evaluate, intercept and treat potential formation of OSA in Infants and Toddlers.

2) Understand why we need to look at tethered oral tissues part of the differential diagnosis of OSA in infants and toddlers.

3) Understanding problems associated with TOTS and OSA in infants and children.

4) How TOTs left untreated can affect Adults.

WARNIER Morgane, SLP | BELGIUM

DETECTION OF MOUTH BREATHING IN PRESCHOOL CHILDREN

Morgane Warnier graduated with highest praise from University of Liege, Belgium. She is an SLP specialized in orofacial myofunctional therapy related to orthodontics, sleep disordered breathing and bruxism. She worked for 5 years in a dentofacial orthopedics practice in addition to her own practice. She quickly became an international speaker, peer reviewer and teacher in this field. In 2018 she received a grant from the Belgian National Funding for Reasearch and started a PhD at the University of Liege. She is now conducting a longitudinal study about myofunctional development. Morgane Warnier promotes an evidence-based and interdisciplinary practice of myofunctional therapy.

ABSTRACT

Early recognition of mouth breathing (MB) is essential to prevent negative impact on myofunctional and morphological orofacial development, but also to avoid behavioural and learning disabilities. Prevention is now considered as a key factor in the clinical field; still research needs to put more effort into focusing on preschool children, as it is known that MB decreases in time. The department of SLP at the University of Liege, Belgium, is following fifty children from 3 to 5 years old to study orofacial myofunctional development and their eventual link with speech development. This presentation will focus on the first part of this study, which includes association of MB reported by parents with information observed by experts and non-experts to detect early apparition of MB.

LEARNING OUTCOMES

1) To assess a review of the literature on Mouth Breathing in young children.

2) To identify risk factors associated with early Mouth Breathing

3) To discuss approaches to assessment for Mouthbreathing in preschool children.

4) To recognise therapy techniques used with 0-6 year olds to promote optimal craniofacial growth.

BEGNONI Giacomo, DDS | ITALY

CHARACTERISATION OF ATYPICAL SWALLOWING: HOW CAN MYOFUNCTIONAL THERAPY HELP?

BIO Giacomo Begnoni obtained a degree in Dentistry from the University of Milan, Italy, in July 2011. At the same University he achieved his Specialization in Orthodontics in March 2015. From 2015 to 2018 he was a Research Fellow at the Department of Anatomy - University of Milan where he obtained his PhD in Oral Sciences in December 2018. Since January 2020 he is Clinical Coordinator at the Oral Health Science Department – Orthodontics of the University Hospitals Leuven – KU Leuven (Belgium). He focuses his research activity on morphological and functional traits in orthodontic patients.

ABSTRACT

Atypical swallowing (AS) has been defined as an oral dysfunction that occurs when the correct swallowing maturation does not take place and the typical characteristics of infantile swallowing, such as tongue thrust, persist after six years of age. It has been suggested that AS may negatively influence the skeletal, alveolar and functional development of the stomatognathic system, but its specific effects are still unclear. The etiology of AS is multifactorial: bad habits, environmental and hereditary factors, and oral and allergic diseases have been described to be involved in its onset. Myofunctional therapy (MFT) is a conventional therapy based on the education of all the multi-functions involved in the stomatognathic system: swallowing, breathing, chewing, speaking and sensory activities. 100 patients with (AS group - 11.50 ± 2.12) and 100 patients without (control (C) group - 11.37 ± 2.42) atypical swallowing were retrospectively selected. As a result, AS seems to affect the skeletal growth causing mandibular clockwise rotation, skeletal class II, open bite and incisor proclination. To compensate for these effects, an increase in alveolar growth together with molar eruption seems to be induced. Standardized surface electromyography (ssEMG) analysis was performed to detect the activity of masseter (MM), temporalis (TA) and submental (SM) muscles. Two different muscular performance models were defined: patients with AS showed a longer activity of all the muscles involved with a lower intensity of SM activity than that of controls.The effects of MFT on the muscular function and behavior in a group of patients with AS were analysed and second dentition completed. Functional ssEMG and clinical ("orofacial muscular evaluation with score" protocol - OMES) analyses were conducted to detect the effects of MFT (10 week session) in a group with AS. SsEMG was performed to analyze the activity of MM, TA and submental SM muscles before (T1) and after (T2) the MFT. As a result, MFT permits a significant shortening of the muscular activation pattern and an increase in SM activity. The improvement of oral functionalities is possible and identifiable thanks to the use of standardized protocols.

LEARNING OUTCOMES

1) To define the cephalometric traits of patients with and without atypical swallowing.

2) To identify the muscle activity in patients with and without atypical swallowing.

3)To explore the efficacy of myofunctional treatment on patients with atypical swallowing.

DAAYAN Sharona, DDS, DMSc | BELGIUM

GUM DISEASE: A NEW PARADIGM INCLUDING MYOFUNCTIONAL THERAPEUTIC INTERVENTION

Dr. Sharona is a Harvard-trained, board-certified periodontist who uses comfort-enhancing technologies like lasers combined with nature-based therapies and traditional wisdom. She is an airway-centered periodontist who understands that successful treatment of gum diseases will also serve the fundamental need to breathe properly. She is passionate about helping her patients keep their own teeth in a state of health, function, comfort and beauty while reducing chronic inflammation in the mouth and body. She is a teacher and an oral health advocate who takes a comprehensive approach not just to treating gum diseases but also transforming her patients by healing the underlying causes.

ABSTRACT

Periodontal (gum) disease is loss of the attachment apparatus of the teeth caused by dysbiosis of the oral flora and likely aggravated by unfavorable lateral forces on the teeth. Despite the advanced technologies in oral hygiene aids and reported higher frequencie s of dental cleanings in the United States, periodontal disease continues to be the primary cause of tooth loss in adults. The high incidence of periodontal disease correlates with the epidemic of sleep disordered breathing such as sleep apnea, snoring and upper airway resistance syndrome. In this lecture we will explore the role of orofacial myofunctional disorders (OMDs), such as mouth breathing, tongue-tie, and tongue thrusting, as risk factors for periodontal disease and gingival recession. We will also discuss the role of the periodontist in frenum restriction removal as part of a comprehensive plan to reduce the progression of periodontal disease.

LEARNING OUTCOMES

1) Understand the role of sleep disordered breathing in creating oral dysbiosis.

2) Understand how sleep disordered breathing can increase lateral forces that contribute to bone loss and gingival recession.

3) Implement a new risk assessment for periodontal disease that includes airway, sleep and orofacial myofunctional therapy (OMT).

4) Incorporate frenum restriction removal for comprehensive periodontal disease management.

BERRETIN-FELIX Giedre, | BRAZIL

Ms. Berretin-Felix is a graduate in Speech Language Pathology (Bauru School of Dentistry, University of São Paulo - 1996), with a Master's degree in Oral Physiology (Campinas State University - 1999), Ph.D. in Physiopathology in Clinical Medicine (Paulista State University Júlio de Mesquita Filho - 2005) and post doctorate in Swallowing Disorders (University of Florida - 2010). She is currently a Titular Professor, Department of Speech Therapy and Audiology, Bauru School of Dentistry, University of São Paulo, Editor-in-Chief of CEFAC - Speech, Language, Hearing Sciences and Educational Journal, and productivity researcher fellow by the National Council of Scientific and Technological Development.

PRESENTATION #1

MYOFUNCTIONAL THERAPY APPLIED TO PROSTHODONTIC PATIENTS

ABSTRACT

Teeth loss impacts the stomatognathic system performance, since dental occlusion is essential to the chewing process, reducing the food into small pieces, so that it can be swallowed. Teeth number, position, relationship between upper and lower arches, as well as the vertical dimension of occlusion are determinant to deglutition and speech performance. Thus, prosthetic rehabilitation is important for patients to be satisfied with their orofacial aesthetics and functional aspects, lost because of the edentulous process. In this scenario, the role of the speech-language pathologist is essential to guide patients in their adaptation to new prosthetic conditions, especially elderly people, who show muscular weakness, poor oral motor coordination and reduced sensitiveness. The purpose of the myofunctional therapy is to prepare the orofacial musculature, before the dental treatment, to receive dentures and to train the adequate way to chew, swallow and speak, after prostheses placement.

LEARNING OUTCOMES

1) identify functional problems resulting from teeth loss.

2) know how different modalities of prosthetic rehabilitation impact orofacial functions.

3) Understand the role of speech-language therapists in the interdisciplinary team, in different moments of the dental treatment.

PRESENTATION #2

OROFACIAL MYOFUNCTIONAL ASSESSMENT - MBGR PROTOCOL

ABSTRACT

The stomatognathic system comprehends bone, muscular, articular, nervous, gland, circulatory and lymphatic structures, which are related to the orofacial functions, such as breathing, chewing, swallowing and speech. The orofacial assessment is essential to identify the cause of the disturbances, in order to provide an adequate diagnosis and an appropriate treatment in the orofacial motricity area. Thus, the use of standardized protocols is essential. The MBGR Protocol (the acronym stands for the first letter of the authors' last names: Marchesan, Berretin-Felix, Genaro, Redher) has been developed to be applied to patients from 6 years old and comprehends two instruments: Clinical History and Clinical Exam. Both provide information that must be analyzed together, in a complementary approach. In the Clinical Examination, the evaluator can use scores to classify the gravity of the alteration found, including measurements and analyses of the face, extra and intra oral structures, tonicity, mobility and sensitiveness aspects, as well as breathing, chewing, swallowing and speech. Most of the information must be video recorded to be checked posteriorly, in a very detailed way, by using slow motion function, in order to understand possible compensations and disturbances presented. The MBGR Protocol was translated into English in a master dissertation project and the manual of application is being developed, so as to guide professionals on its use.

LEARNING OUTCOMES

1) - identify normal and altered morphological and functional aspects of the stomatognathic system.

2) know how to analyze and classify the facial anthropometry, extra- and intra-oral characteristics, as well as tonicity, mobility and sensitiveness.

3) Understand the relationship between morphological and functional (breathing, chewing, swallowing and speech) aspects.

GOUZLAND Thierry, PT, OMT | FRANCE

THE ORO-FACIAL SCORE (GOS12) : THE INTERDISCIPLINARY TEAM

Thierry Gouzland is a physiotherapist with an exclusive practice in OMT in the PEAS : Sleep Apnea Exploration Pole at the Clinique Bel-Air, in France. He is a holder of a university degree in cranio-facial anatomy and in sciences of movement analysis. He is also qualified in structural osteopathy. He is author of scientific articles and book chapters. He is the current President of the french Oro-Maxillo-facial Reeducation Association AROM.

ABSTRACT

Nowadays, patient care involves a multidisciplinary approach, and the myofunctional therapist has their place in the team. In ortho-surgical protocols, in sleep apnea, as well as in bariatric surgery or other specialties. When we evaluate a patient we need to objectively assess the dysfunction, to establish the right care and to track progress and changes. That's why it is interesting and necessary to use the GOS 12, an anatomical and functional score of the oro-facial system. To have an effective and useful communication tool between different professionals, orthodontists, maxillofacial surgeons, therapists, ENT, pulmonologists the GOS12 is an easy way to assess, monitor and exchange information with a shared language for different practitioners.

LEARNING OUTCOMES

1) To outline and describe the Oro-facial Score

2) To demonstrate the application of the Oro-facial Score in clinical case study highlighting its use in assessment and to track progress.

3) To demonstrate the use of the Orofacial Score as a tool of communication to liaise with the multi-disciplinary team and to provide a timely approach to treatment accessing the correct professional at the right time.

ACADEMY OF APPLIED MYOFUNCTIONAL SCIENCES

FIFTH CONGRESS AND A CALL FOR THE FORMATION OF AN INTERNATIONAL PEDIATRIC ORTHODONTIC SOCIETY

MYOFUNCTIONAL ORTHODONTIC INTERVENTION AT THE EARLIEST AGE POSSIBLE TO HELP THE MOST AMOUNT OF PEOPLE

A VIRTUAL CONGRESS REIMAGINED

A live/on-demand hybrid, with 100+ speakers, in 9 tracks, August 1-30, 2020

NORDSTROM Darick, DDS | USA

ALF AND THE PREEMINENCE OF ORAL NEURO-MYOFUNCTION IN HEALTH HEALING, AND RESILIENCE

His knowledge and experience gained throughout the years of development and use of the ALF has allowed ALF Therapists to support transformative patient care and achieve amazing results. The ALF appliance has revolutionized the role of dentistry in the scope of healthcare as we know it and has the potential for helping generations of people lead healthier, more functional lives while creating beautiful, balanced faces. The simple sophistication of the ALF family of appliances provides opportunities that surpass the expectations of both patients and providers when properly utilized by adequately trained providers in a TEAM approach to wellness.

ABSTRACT

ALF Therapy is uniquely associated with miracles. Over 3 decades of working to understand the science behind these miracles has confirmed the critical role of oral neuro-myofunction in the ongoing human processing and integration of life events on many levels. Most concerning are the global immediate and long-term handicaps resulting from poor oral myofunction and breathing.

LEARNING OUTCOMES

1) To consider what is Neuro-Myofunction, and why is it important to consider both aspects in concert?

2) To identify what is so unique about ALF that lead to the miracles; can that science and how can that understanding be applied be applied to other aspects of human development and healing?

3) To understand why the well-trained Oral Myofunctional Therapist (SLP, RDH, PT, DDS, MS) must be elevated to their position as key player in primary education, treatment of orofacial disorders and development, rehabilitation (physical, emotional, convicts, chronic disability).

CARSTENSEN Steve, DDS, MS | USA

.4 DIMENSIONAL THINKING IN DENTISTRY AND DENTAL HYGIENE

Steve Carstensen DDS has treated sleep apnea and snoring in Bellevue, WA since 1988. He's the Consultant to the ADA for sleep related breathing disorders, has trained at UCLA's Mini-Residency in Sleep and is a Diplomate of the American Board of Dental Sleep Medicine. He lectures internationally, directs sleep education at Airway Technologies and the Pankey Institute and is a guest lecturer at Spear Education, University of the Pacific and Louisiana State Dental Schools, in addition to advising several other sleep-related manufacturers. For the AADSM he was a Board Member, Secretary-Treasurer and President-Elect. From 2014 – 2019 he was Editor of Dental Sleep Practice Magazine. In 2019, Quintessence published A Clinician's Handbook of Dental Sleep Medicine, written with a co-author.

ABSTRACT

Dental professionals are taught the science and theory of health and disease related to the oral cavity. We are trained to recognize disease and apply corrective therapy. By expanding our view to embrace the adjacent nasal airway and the function of the craniofacial respiratory system, and considering the impact poor habits and poor health has over time, we have powerful ways of influencing lifetime health. Our regulations, licensure, and trade institutions provide guidelines, limits, and protection around what we can do in practice. This talk will help expand any clinician's thinking about what role they play, give an update to what the US regulations and trade groups are doing to help, and provide important verbal skills to practitioners for effective communication with their colleagues and patients.

LEARNING OUTCOMES

1). To discuss a strategy for getting involved with preventive airway care with all members of a multi-disciplinary team and with colleagues.

2) For professionals to recognise their role in the multi-disciplinary team to support treatment and therapy.

3). To understand why it's critical to start orthodontic treatment should start as early in life as possible to achieve the best outcome.

TRACK 10

VIRTUAL
EXHIBIT HALL

AOMT

ACADEMY of OROFACIAL MYOFUNCTIONAL THERAPY

The Academy of Orofacial Myofunctional Therapy is Honored to

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Academy of Applied Myofunctional Sciences
910 Via De La Paz, Suite 106 Pacific Palisades, CA 90272 USA
Email: info@aamsinfo.org | Tel: +1-310-454-9444