

Dental Sleep Medicine Mini-Residency

Guest Speakers



John Remmers, MD

Dr. Remmers is a pulmonologist & clinical professor of internal medicine at the University of Calgary with an active sleep practice in the sleep lab at the Foothills Medical Centre in Calgary. He is a recognized physiologist, physician, pioneer & innovator in sleep medicine, having invented products ranging from portable diagnostic sleep monitors to auto-titrating CPAP devices. A world renowned expert in the field of snoring & obstructive sleep apnea (OSA), being the first researcher to elucidate the pathogenesis of sleep apnea & to demonstrate that sleep apnea is caused by an anatomical narrowing of the pharynx.

Dr. Remmers is a well known respiratory physiologist, who contributes to the fields of the neurobiology of respiratory rhythmogenesis, chemoreception, & the pathophysiology of the control of breathing. Published over one hundred peer reviewed publications in the area of respiratory physiology & served two terms as the Editor-in-Chief of the Journal of Applied Physiology. His recent research has been dedicated to oral appliance therapy (OAT) to address the needs of OSA patients who are dissatisfied & non-compliant with CPAP. A key factor inhibiting the widespread use of OAT is the challenge of determining which patients will respond to this therapy.



Orfeu Buxton, PhD

Associate Professor Biobehavioral Health Penn State University, Assistant Professor Division of Sleep Medicine Harvard Medical School, Associate Neuroscientist Department of Medicine Brigham and Women's Hospital, Adjunct Associate Professor Department of Social and Behavioral Sciences Harvard School of Public Health, Faculty Affiliate of Penn State's Population Research Institute (PRI), Member of the Graduate Faculty in Neuroscience.

Dr. Buxton's research primarily focuses on 1) the causes of chronic sleep deficiency in the workplace, home, and society, and 2) the health consequences of chronic sleep deficiency, especially cardiometabolic outcomes, and the physiologic and social mechanisms by which these outcomes arise. Successful aging is a central focus of this work. Ongoing interdisciplinary human studies involve sleep loss, aging, and insomnia, as well as health disparities. Dr. Buxton serves on the Internal Advisory Board for the Harvard School of Public Health Center for Work, Health, and Well-Being. Dr. Buxton is a member of Work, Family, and Health Network, co-chairs the Steering Committee, and leads the Biomarker and Actigraphy Data Coordinating Center (BADCC) for Work, Family, and Health Study, among others.



Gilles Lavigne, DMD, PhD

Dr. Lavigne completed his postdoctoral training on the neurobiology of pain at NIH, Bethesda, USA. He received a Doctor honoris causa from the Faculty of Medicine, University of Zurich, Switzerland. He holds a Canada Research Chair in Pain, Sleep & Trauma and is Dean of the Faculty of Dental Medicine at the Université de Montréal, Canada. Gilles Lavigne is internationally recognized for his experimental and clinical research projects on sleep bruxism and the interactions between sleep, pain, and breathing disorders. He currently conducts studies on 1) the role of sleep in placebo analgesia and pain relief expectations in emergency medicine, 2) the influence of opioids on sleep airway function, and 3) sleep and pain interactions in brain injury patients.



Umakanth Katwa, MD; D.ABSM

Dr. Umakanth Khatwa is an Attending Physician; Director of Sleep Laboratories, Director of Aero-digestive Center, and Director of Primary Ciliary Dyskinesia Program at Boston Children's Hospital. He specializes in Pulmonary Medicine, Sleep Disorders, Chronic Lung Disease, Sleep Disordered Breathing, Apnea, Cough, Respiratory Diseases, Aerodigestive Disorders, and Cystic Fibrosis. Dr. Khatwa received his medical education from Karnataka Institute of Medical Sciences and completed his training at Lincoln Medical Center, All India Institute of Medical Sciences, Weil Cornell Medical School, Harvard Medical School, Beth Israel Deaconess Medical Center, and Boston Children's Hospital. Instructor in Pediatrics, Harvard Medical School.

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Audrey Yoon, DDS, MS

Dr. Yoon completed her dual-specialty orthodontic and pediatric dentistry residency at the University of California at Los Angeles (UCLA). She also earned her Doctor of Dental Surgery and Master of Science degree with honors at UCLA. Dr. Yoon's field of expertise includes the effective utilization of orthodontic Temporary Anchorage Device (TAD) to minimize orthognathic surgery and maximize esthetic successful outcomes. Dr. Yoon is a collaborative team member of the Stanford Medical Center sleep apnea research and has developed pioneering distraction osteogenesis technique for the treatment of obstructive sleep apnea. Their most recent publication is 'Distraction Osteogenesis Maxillary Expansion (DOME) for Adult Obstructive Sleep Apnea Patients with High Arched Palate.'



Greg Essick, DDS, PHD; D. ABDSM

Dr. Greg Essick is Professor in the Department of Prosthodontics and in the Center for Pain Research and Innovation at the University of North Carolina at Chapel Hill. He completed his D.D.S and his Ph.D. training in neurophysiology at the University and post-doctoral work at the Salk Institute, La Jolla, California. Dr. Essick's NIH-supported research includes studies of chronic orofacial pain and of trigeminal nerve injury. His recent research pertains to the associations between obstructive sleep apnea and temporomandibular disorders (TMD), and periodontitis. He authors or co-authors more than 100 journal articles and book chapters. His faculty practice focuses on dental sleep medicine, which he is implementing into the curriculum at the UNC School of Dentistry.



Fernanda Almeida, DDS, PHD; D. ABDSM

Dr. Almeida is an assistant professor at the University of British Columbia (UBC). Dr. Almeida received her Doctor of Dental Surgery degree from the University of Sao Paulo, Brazil, and her Master of Science from the Federal University of Sao Paulo, Brazil. She is an alumna of UBC, where she completed her Doctor of Philosophy (Dental Sciences). Dr. Almeida has been involved in oral appliance research and the treatment of patients with obstructive sleep apnea since 1996, and her research is focused on oral appliance side effects, compliance, titration modalities, imaging and treatment outcome. With other UBC Dentistry faculty, Almeida has designed an interdisciplinary program in dental sleep medicine for the clinical specialty graduate programs in orthodontics and pediatric dentistry. She is also a member of the executive board and research chair of the American Academy of Dental Sleep Medicine.



Scott Sands, Ph.D

Assistant Professor of Medicine, Harvard Medical School. He has a unique combination of experience in 1) mechanistic physiology trials in patients with sleep apnea (e.g. supplemental oxygen, respiratory stimulation with acetazolamide, oral appliances, atomoxetine, oxybutynin). 2) deep phenotyping physiology studies to understand the mechanisms of sleep apnea (involving esophageal catheters, intramuscular electrodes, specialized manipulation with continuous positive airway pressure). and 3) development of novel engineering-based methods to non-invasively estimate the causes of sleep apnea and predict responses to therapies.

He has taught deep phenotyping methods to investigators (physicians and PhDs) locally, nationally and internationally. His non-invasive methods of estimating the causes of sleep apnea from routine sleep studies are being applied to translational research studies internationally.

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Jayme Matchinski, JD

Ms. Matchinski concentrates her practice on health care and corporate law, with a particular focus in the area of sleep medicine. She assists physicians and health care systems with compliance, reimbursement, licensure and certification issues, as well as the purchase, sale and formation of health care entities. Her clients include sleep disorder centers, durable medical equipment companies, rehabilitation hospitals and facilities, ambulatory surgery centers, longterm acute care hospitals, skilled nursing facilities, nursing homes and assisted living facilities. Previously, Ms. Matchinski served as the vice president of a national health care consulting firm. Ms. Matchinski is a member of the editorial advisory board of Sleep Diagnosis and Therapy Journal, and an advisory member of the board for the Sleep Center Management Institute in Atlanta, GA.



Noah Siegel, MD; D. ABDSM

Noah S. Siegel is board certified in both Sleep Medicine and Otolaryngology Head and Neck Surgery (ENT). Dr. Siegel is the Medical Director of Otolaryngology for Massachusetts Eye and Ear's Longwood facility in Boston. He is a member of the Faculties at Harvard Medical School, and Tufts University School of Medicine. Dr. Siegel attended the University of Michigan in Ann Arbor for both his undergraduate and Medical School training where he graduated Magna Cum Laude in 1995. He completed his general surgery internship at Northwestern University in Chicago and then completed his residency at Harvard University in Otolaryngology- Head and Neck Surgery. Dr. Siegel has an active medical practice with primary interest in sleep disorders, allergy and pediatric otolaryngology. In addition, he regularly teaches courses and classes at national conferences and for academic medical/dental training programs.



Antonio Romero, DDS, PhD

Dr. Romero graduated from University of Valencia, Doctor cum laude PhD, Postgraduate Degree in Statistical Analysis from Health Sciences. University of Valencia, Diplomate by the American Board of Orofacial Pain. Member of the Research Committee of the American Academy of Dental Sleep Medicine, member Spanish Society of Craniomandibular Dysfunciton, Spanish Pain Society and Spanish Society of Dental Sleep Medicine, private practice exclusively limited to TMD, Orofacial Pain and Dental Sleep Medicine in Valencia (Spain). Dr. Antonio Romero has lectured widely on the topics of TMD, Bruxism, Orofacial Pain and Dental Sleep Medicine both in Spain and Internationally.uxism, Orofacial Pain and Dental Sleep Medicine both in Spain and Internationally.



Stanley Yung-Chuan Liu, MD, DDS, FACS

Stanley Liu is an Assistant Professor of Otolaryngology/Head & Neck Surgery and by Courtesy, of Plastic and Reconstructive Surgery, at Stanford University School of Medicine. He is Director of the Sleep Surgery Fellowship at Stanford University School of Medicine. Dr. Liu received medical and dental degrees from the University of California-San Francisco (UCSF). He was a former Howard Hughes Medical Institute (HHMI) Research Scholar and Stanford Biodesign Faculty Fellow. He completed the Stanford sleep surgery fellowship in 2014 with the Department of Otolaryngology and sleep surgery pioneer Dr. Robert Riley. Dr. Liu practices the full scope of sleep apnea surgery including nasal, palate, tongue base, hypoglossal nerve stimulation, genioglossus advancement, adult maxillary expansion (DOME), and maxillomandibular advancement (MMA). He introduced an updated sleep surgery algorithm at Stanford. Dr. Liu's active areas of research include dynamic airway examination to optimize sleep surgery outcome, virtual surgical planning for facial skeletal surgery, and neuromodulation of the upper airway. He has given keynote talks and grand rounds internationally at preeminent sleep conferences and universities across disciplines. He has published over 70 scientific articles and medical texts, with original scientific work on sleep surgery.