

**Control of Breathing during Sleep and Sleep Apnea**

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1. Testosterone restores respiratory long term facilitation in old male rats. Mary Behan, University of Wisconsin-Madison.
2. Exploring Murine Carotid Body Responses to Hypoxia: An in-vivo model of carotid sinus nerve activity. Luis Pichard, Johns Hopkins University Bloomberg School of Public Health.
3. The C57BL/6J Mouse is a pre-clinical, genetic model for breathing instability. Kingman Strohl, Case Western University.
4. Input from the carotid body chemoreceptors determines the sensitivity of the medullary chemoreceptors. Gregory M. Blain, University of Wisconsin-Madison.
5. Protein kinase a modulates the transmission of the respiratory drive to hypoglossal motoneurons in vivo. Marq-Andre DuBord, University of Toronto
6. On the Role of Pedunculopontine Tegmental Neurons in the Modulation of the REM sleep State and its Respiratory Phenotype. Kevin Grace, University of Toronto.
7. State-dependent modulation of respiratory activity by perfusion of neuropeptides into the pre-Botzinger Complex of the adult rat in-vivo. Gaspard Montandon, University of Toronto.
8. Neurotrophic factors may play a role in development of the carotid body (CB). Eric W. Kostuk, Johns Hopkins University.

**Impact of Sleep Apnea on the CNS**

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9. The Effects of Sleep deprivation on a cross-modality divided attention task: a functional neuroimaging study. Melinda Jackson, Austin Health
10. Changes in Cerebellum and Cortical Grey Matter Volume in Obstructive Sleep Apnea. Melinda L. Jackson, Austin Health.
11. Dynamic changes in brain oxygen partial pressure during obstructive apneas. Isaac Almendros, CIBER Enfermedades Respiratorias.

**Obesity, Genetics, and Sleep Apnea**

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12. Gene Networks and Biological Pathways in Bone Marrow-Derived Very Small Embryonic Stem Cells (VSEL) from Mice Following Intermittent Hypoxia (IH). Sina Gharib, University of Washington.
13. Contribution of genetic risk variants associated with obesity to risk of obstructive sleep apnea. Hafdis Helgadóttir, deCODE Genetics.

**Sleep Apnea and Cardiovascular Disease**

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14. Sleep Apnea and Left Atrial Volume in Patients with Atrial Fibrillation. Felipe N. Albuquerque, Mayo Clinic
15. Excessive Daytime Sleepiness Does Not Predict Sleep-Disordered Breathing in Patients with Atrial Fibrillation. Felipe N. Albuquerque, Mayo Clinic.
16. Cardiovascular Disease is Common Among Patients with Obstructive Sleep Apnea. Andrew Calvin, Mayo Clinic
17. Is the Berlin Questionnaire Accurate for Detection of Obstructive Sleep Apnea after Myocardial Infarction? Fatima Sert-Kuniyoshi, Mayo Clinic Rochester.
18. Increased sympathetic activity in children with obstructive sleep apnea. Denise O'Driscoll, Monash University.
19. Xanthine oxidase inhibition preserves endothelial function during chronic intermittent hypoxia in rats. John M. Dopp, University of Wisconsin-Madison.
20. Role of Leukotriene B4 in Intermittent Hypoxia-Induced Atherogenesis. Richard C. Li, University of Chicago.
21. Modulation of NF- $\kappa$ B Signaling during Intermittent Hypoxia by Nitric Oxide. John F. Garvey, St. Vincent's University Hospital.
22. Obstructive Sleep Apnea and Masked Hypertension: Dependent and Independent Blood Pressure Effects on Arterial Stiffness in Men. Luciano F. Drager, Heart Institute University of Sao Paulo.
23. Sleep Disordered Breathing and Pro-thrombotic Biomarkers: Cross-Sectional Results of the Cleveland Family Study. Reena Mehra, Case Western Reserve University.

**Sleep Apnea and Metabolic Dysregulation**

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24. Intermittent hypoxia (IH) causes insulin resistance and impaired insulin secretion in C57BL/6J mice. E. John Lee, University of Pittsburgh.
25. Effect of acute graded hypoxia on fat and cholesterol metabolism in mice. Jonathan Jun, Johns Hopkins University.
26. Impact of Untreated Obstructive Sleep Apnea on Glucose Control in Type 2 Diabetes. Renee S. Aronsohn, University of Chicago.
27. Experimental reduction of sleep duration or quality is associated with impaired insulin signaling in the adipocyte. Josiane Broussard, University of Chicago.
28. Electrocardiogram-based sleep spectrogram measures of sleep stability and glucose disposal in sleep disordered breathing. Melanie S. Pogach, Beth Israel Deaconess Medical Center.
29. Effects of Sleep Fragmentation on Glucose Metabolism in Normal Subjects. Katherine A. Stamatakis, Washington University.

### **Sleep Apnea in Comorbid Conditions and Special Populations**

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30. Sleep Apnea in Women Undergoing Chemotherapy for Breast Cancer. Sonia Ancoli-Israel, University of California.
31. Sleep disordered breathing, fatigue and sleepiness in HIV-infected and HIV-uninfected men. Susheel Patil, Johns Hopkins School of Medicine.
32. Restless Legs Symptoms in Obstructive Sleep Apnea: The ISAC Cohort. Bryndis Benediktsdottir, University of Iceland.
33. Sleep-disordered breathing is associated with fatigue rather than excessive sleepiness in multiple sclerosis. Marta Kaminska, McGill University Health Center.
34. Sleep disordered breathing and sleep fragmentation in COPD. Christian Reinke, Johns Hopkins University.
35. Standard Anthropometric Measurements Predict Sleep-Disordered Breathing in Active NFL Players. Tom Rice, University of Pittsburgh.

### **Obesity and Pathogenesis of Sleep Apnea**

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36. Rat Model of Obstructive Sleep Apnea (OSA) Suggests A Novel Neurochemical Mechanism of Upper Hyperactivity in OSA Patient. Irma Rukhadze, University of Pennsylvania.
37. Peri-pharyngeal Tissue Movement and Morphology with Tracheal Traction. Jason Amatory, Ludwig Engel Centre for Respiratory Research.
38. Genioglossus motoneuron activity: firing behavior of single motor units in quiet breathing, CO<sub>2</sub> and CPAP in humans. Julian P. Saboisky, Brigham and Women's Hospital.
39. Genioglossus activity in obese adolescents with and without obstructive sleep apnea syndrome during sleep. Jingtao Huang, The Children's Hospital of Philadelphia.
40. Effect of Neuromuscular Activity on Upper Airway Mechanics during Sleep. Abdul Ghani Sankri-Tarbichi, Wayne State University.
41. Lung Volume, tracheal traction and upper airway function. Amit V. Patel, New York University School of Medicine.
42. Weight loss improves upper airway mechanical loads and neuromuscular responses during sleep. Susheel P. Patil, Johns Hopkins University.
43. A Technique for Measuring Ventilatory Control Stability (Loop Gain) During Sleep. Andrew Wellman, Brigham and Women's Hospital.
44. Nocturnal Rostral Fluid Shift: A Unifying mechanism for the Pathogenesis of Obstructive and Central Sleep Apnea in Heart Failure. Dai Yumino, University of Toronto.
45. Identifications of upper airway cranial facial risk factors. Luqi Chi, University of Pennsylvania.

### **Free Radical Generation and Inflammation in Sleep Apnea**

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46. The effect of obstructive sleep apnea and obesity on interleukin-6 and leptin levels: The Icelandic Sleep Apnea Cohort. Erna S. Arnardottir, Lansdipitali University Hospital/University of Pennsylvania.
47. Recurrent airway obstructions enhance the migration and endothelium-adherence of bone marrow mesenchymal stem cells. Alba Carreras, University of Barcelona-IDIBAPS (R. Farre).
48. Altered neurotransmitter synthesis during intermittent hypoxia: Role of reactive oxygen species-dependent post-translational protein modifications. Gayatri Raghuraman, University of Chicago.
49. Reactive Oxygen Species dependent Ca<sup>2+</sup> Signaling mediates enhanced exocytosis by Intermittent Hypoxia. Dangjai Souvannakitti, University of Chicago.

### **Diagnosis and Treatment of Sleep Apnea**

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50. Clinical and Polisomnographic Features in Complex Sleep Apnea Syndrome. Tansu Ciftci, Gazi University
51. Comparison of full versus short induced sleep polysomnography for the diagnosis of obstructive sleep apnea. Pedro Genta, Heart Institute University of Sao Paulo School of Medicine
52. Automated regression model for assessing respiratory effort during central sleep apnea events using ECG signals. Ahsan Khandoker, The University of Melbourne
53. Synchronization of Different Sleep EEG Parameters to Estimate Sleep Quality. Thomas Penzel, Charite University Hospital
54. Marked reduction in obstructive sleep apnea severity in slow wave sleep. Peter Catchside, Repatriation Hospital.
55. Do cognitive perceptions influence CPAP Use? Amy M. Sawyer, University of Pennsylvania.
56. Should mixed apnea be classified with obstructive sleep apnea? Motoo Yamauchi, Nara Medical University.
57. Diagnostic accuracy of a single-channel portable monitor in the diagnosis of obstructive apnea in primary care. Keith KH Wong, Woolcock Institute of Medicine Research and Royal Prince Albert Hospital.
58. The Effect of a High Flow Open Nasal Cannula System on Obstructive Sleep Apnea in Children. Brian M. McGinley, Johns Hopkins University.