

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO**

RESMED CORP.,)	
)	
Plaintiff and)	Case No. 1:23-cv-02221-BMB
Counterclaim Defendant,)	
)	
v.)	
)	
CLEVELAND MEDICAL DEVICES, INC.,)	
)	
Defendant and)	
Counterclaim Plaintiff.)	
)	

**DECLARATION OF CAROLYN M. D’AMBROSIO, M.S., M.D. IN SUPPORT OF
DEFENDANT AND COUNTERCLAIM PLAINTIFF CLEVELAND
MEDICAL DEVICES, INC.’S OPENING CLAIM CONSTRUCTION BRIEF**

I, Carolyn M. D’Ambrosio, MS, MD, hereby declare that:

1. I make this Declaration based upon my own personal knowledge, information, and belief, and I would and could competently testify to the matters set forth herein if called upon to do so.

2. I understand that I am submitting this Declaration to assist the Court in determining the proper construction of certain terms used in the asserted claims of the patents being asserted in the above-referenced action.

I. BACKGROUND, EXPERIENCE, AND QUALIFICATIONS

3. A list of my qualification and experience is listed on my curriculum vitae attached hereto as Exhibit 1.

4. I hold a B.A. in Biological Sciences from Cornell University, and a M.S. in physiology and a M.D. from George Washington University. I am currently an Attending Physician at Brigham and Women’s Hospital in the Section of Sleep and Circadian Disorders, Department of Medicine and Faculty at Harvard Medical School. I previously was an

Associate Professor at Yale School of Medicine's Department of Internal Medicine, Section of Pulmonary, Clinical Care and Sleep Medicine, Clinician Educator Track.

5. I have been practicing in the field of sleep medicine since 1999 and hold a Board Certification in Sleep Medicine from the American Board of Internal Medicine, amongst other Board Certifications in pulmonary medicine and critical care medicine.

6. Throughout my career I have held numerous administrative positions such as the Director of Sleep Medicine Services for the Connecticut Veterans Administration, the Director of The Center for Sleep Medicine at Tufts Medical Center, the Director of the Sleep Center for Waltham Hospital and Morton Hospital, Chair for the Internal Medicine Resident's mentorship program at Tufts Medical Center, the Program Director for the Sleep Medicine Fellowship at Tufts Medical Center, Vice Chief for Fellowship Training and Education, Section of Pulmonary, Critical Care and Sleep Medicine for Yale School of Medicine, and the Chair of CHEST Sleep Board Review for the American College of Chest Physicians.

7. I have been garnered multiple awards and recognition from my colleagues. I have won on a national level the Distinguished CHEST Educator Award every year since its inception and Distinguished Service Award in 20204 by the American College of CHEST Physicians, named Fellow for the American Academy of Sleep Medicine, Fellow for the American College of Chest Physicians, and Outstanding Program Director and Medical Educator Award for the Association of Pulmonary and Critical Care Program Directors.

8. I have presented at various conferences on the topic of sleep related breathing disorders such as my presentations; "OSA in Women" for the New England Baptist Hospital Grand Rounds, "Update in Obstructive Sleep Apnea" at Brigham and Woman's Faulkner Hospital Grand Rounds, "Rare Sleep Disorders" at Stamford Hospital, Department of Medicine

Grand Rounds, “Sleep and Wellness” for Brigham and Women’s Hospital Lung Transplant Support Group, “Home Sleep Testing and Auto-CPAP: where are we now and where are we going?” for Brigham and Women’s Hospital, Division of Pulmonary and Critical Care Medicine Pulmonary Grand Rounds, “Cardiovascular Consequences of Obstructive Sleep Apnea” for the Mini-Residency in Sleep Apnea, Tufts Dental School, “Overview of Sleep Physiology and Obstructive Sleep Apnea” Tufts University School of Dental Medicine, Dental Sleep Seminar, “Sleep Disorders Update” for Carney Hospital Grand Rounds, and “Obstructive Sleep Apnea: Who to Test and Treat” for Waltham Hospital Grand Rounds. These are just some of the talks and presentations I have given over my career.

9. I presently Chair for the American College of Chest Physicians - Sleep Medicine Board Review; Guidelines on Screening for Obstructive Sleep Apnea in Pregnancy; Sleep Medicine Network; the Woman and Pulmonary Advisory Board; CHEST Foundation Woman’s Lung Health Grant Review Committee.

10. I have authored numerous peer-reviewed publications, books, and chapters such as Auto-titrating versus fixed continuous positive airway pressure for the treatment of obstructive sleep apnea: A systematic review with meta-analyses, Long-term health outcomes in obstructive sleep apnea: A systematic review of comparative studies of breathing measures as surrogate outcomes, Sex and Gender in Lung Diseases Part 1 and Part 2(invited reviews), and Editor for Clinics in Chest Medicine Sleep-Disordered Breathing: Beyond Obstructive Sleep Apnea.

II. MATERIALS REVIEWED

11. I have reviewed in detail U.S. Patent No. 11,602,284 (“the ’284 Patent”), U.S. Patent No. 11,375,921 (“the ’921 Patent”), U.S. Patent No. 11,690,512 (“the ’512 Patent), U.S. Patent No. 11,786,680 (“the ’680 Patent”), U.S. Patent No. 11,857,333 (“the ’333 Patent”) and

U.S. Patent No. 11,872,029 (“the ‘029 Patent”) (collectively, the “Asserted Patents”), the prosecution histories of each of the Asserted Patents, and the parent prosecution histories for the Asserted Patents (U.S. Patent App. Serial Nos. 11/266,899; 17/878,152).

12. I reviewed certain terms that have been identified by the Parties for construction. I also reviewed each of CleveMed’s and ResMed’s proposed claim constructions and the accompanying disclosures of intrinsic evidence in support of their claim constructions of these terms. I also reviewed the Court’s Claim Construction Order in *Cleveland Medical Devices, Inc. v. ResMed, Inc.*, No. 22-794-GBW, Dkt. No 181 (D. Del. Oct. 30, 2023).

III. PERSON OF ORDINARY SKILL IN THE ART

13. Counsel informed me that a “person of ordinary skill in the art” or a “POSITA” is a hypothetical person who is presumed to be familiar with the relevant scientific field and its literature at the time of the invention for the relevant patents. The time of the invention for the ‘284, ‘921, ‘680, ‘333, and ‘029 Patents is 2005. The time of the invention for the ‘512 Patent is 2006. I understand that this hypothetical person is also a person of ordinary creativity, capable of understanding the scientific principles applicable to the pertinent field.

14. Counsel informed me that the level of ordinary skill in the art may be determined by reference to certain factors, including (a) the type of problems encountered in the art, (b) prior art solutions to those problems, (c) the rapidity with which innovations are made, (d) the sophistication of the technology, (e) the vernacular used and understood by works in the field, and (e) the educational level of active workers in the field.

15. Based on the information provided to me, it is my opinion that a POSITA for the Asserted Patents is a person with an undergraduate degree in biomedical engineering, electrical engineering, or a similar field, or who has 3 to 5 years of experience in the relevant

medical devices industry. I have provided my opinion based on this level of skill for one of skill in the art.

IV. OVERVIEW OF CLEVEMED'S PATENTED TECHNOLOGIES

16. The '921, '029, and '333 Patents disclose inventions that are valuable in the treatment of sleep apnea because they extend the clinical sleep lab environment into the patient's home so that the resulting treatment and diagnosis can be as accurate as possible. *See, e.g.*, '921 Patent at 22:29-40; '029 Patent at 22:42-53; '333 Patent at 2:45-62. The '921, '029, and '333 Patents disclose numerous embodiments that integrate the diagnosis capabilities of a sleep testing device with the treatment of a positive airway pressure device that can adjust a patient's treatment based upon their current physiological condition. *See, e.g.*, '921 Patent at 2:22-3:53; '029 Patent at 2:38-4:2; '333 Patent at 2:32-5:2. The embodiments also disclose the use of various sensors to collect and quantitatively measure a patient's symptoms. *See, e.g.*, '921 Patent at 18:51-21:67; '029 Patent at 18:66-22:13; '333 Patent at 21:33-24:45. The result of these calculations is an output showing how severe the patient's symptoms are during the period they used the integrated treatment system. *See, e.g.*, '921 Patent at 18:51-21:67; '029 Patent at 18:66-22:13; '333 Patent at 21:33-24:45. This output is then used to adjust the treatment device automatically or by transmitting it to a clinician working at a remote location who can then remotely access and adjust the device accordingly. *See, e.g.*, '921 Patent at 22:1-28; '029 Patent at 22:14-41.

17. The '512 Patent is valuable in the diagnosis of sleep apnea because it discloses a novel wireless data acquisition system for electroencephalogram ("EEG") and other physiological conditions that uses software filtering to make it possible to determine airflow, tidal volume, ventilation rate, and snore detection from a single pressure transducer. '512 Patent at 2:3-49. The '512 Patent's sleep diagnostic data acquisition system measures and then

wirelessly transmits sleep data from sensors used for diagnosing sleep disorders. *Id.* at Claim 1. The signal processing unit receives signals regarding respiratory ventilation, blood oxygenation, and body position of the patient, from the sensors, and then the wireless transceiver or transmitter transmits the sleep data collected wirelessly to a cell phone or PDA to be processed, analyzed, and outputted to allow for diagnosis of a sleep disorder. ‘512 Patent at Claim 1.

V. CONSTRUCTION OF THE DISPUTED CLAIM TERMS

18. I understand there are competing constructions for two claim terms for the Asserted Patents. I opine only on one of the term “respiratory ventilation.”

“Respiratory ventilation” (‘512 Patent, Claim 1)

Claim Term	CleveMed’s Proposed Construction	ResMed’s Proposed Construction
Respiratory ventilation	The process of respiratory breathing wherein air flows into the lungs during inspiration and out of the lungs during expiration	The amount of air into the lungs during inspiration and out of the lungs during expiration

19. “[R]espiratory ventilation” is “the process of respiratory breathing wherein air flows into the lungs during inspiration and out of the lungs during expiration.” Clinical professionals understand this term refers to moving air in and out of the lungs (*i.e.*, breathing) while a patient uses the sleep diagnostic data acquisition system, which is consistent with how the claims and specification of the ‘512 Patent use this term. For example, Claim 1 describes that respiratory ventilation may be measured directly or indirectly by a sensor, while Claim 2 gives two specific examples of measuring respiratory ventilation according to respiratory effort (*i.e.*, breathing effort) or snore. ‘512 Patent, Claims 1, 2. A POSITA would understand respiratory ventilation in these claims to mean the process of respiratory breathing based on these uses in context. Further, a POSITA would understand that the claimed sensors can

measure various characteristics of a subject's respiratory ventilation. *See, e.g.*, '512 Patent at 8:61-63 ("The subject's respirations can be measured by measurement of airflow, respiratory effort, oxygenation and ventilation, and the like."). Additionally, a POSITA would understand that, as disclosed in the '512 Patent's specification, an airflow sensor measures "a subject's nasal and/or oral breathing pattern," and measures respirations by measuring respiratory airflow, both of which a POSITA would understand as another measurable characteristic of a subject's respiratory ventilation. *See, e.g., id.* at 9:6-9, 9:57-10:4 Thus, because measuring a subject's respirations (*i.e.*, breathing) is associated with measuring various fluctuations that occur during inspiration and expiration (*e.g.*, fluctuations in effort, breathing pattern, airflow), a POSITA would understand that "respiratory ventilation" is "the process of respiratory breathing wherein air flows into the lungs during inspiration and out of the lungs during respiration."

VI. DEFINITENESS OF THE DISPUTED CLAIM TERMS

20. I have been informed that claim construction is a legal issue for the Court to decide. I understand that patent claim terms are to be interpreted based on their meaning to a person of ordinary skill in the art the time of the invention ("POSITA").

21. I have been informed that in interpreting a patent claim, the focus is first on the intrinsic evidence of record, *i.e.*, the patent and its prosecution history, including the claims.

22. I have also been informed that, when the meaning of a term is not apparent from the intrinsic record, one may look at those sources available to the public that show what a POSITA would have understood the claim language to mean, including extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.

23. I have been informed that indefiniteness means whether the claims, in light of the specification and prosecution history, inform a POSITA about the scope of the invention with reasonable certainty.

24. I have been asked for my opinion as to whether the claim terms described below are definite under these standards.

25. As described below, it is my opinion that all of the claims are definite because they satisfy these standards. Further, it is my opinion that that CleveMed's construction for the terms pulse oximeter and oxygenation should be accepted by the Court.

A. The Claim Terms ResMed Alleges Are Indefinite

26. I also understand the parties disagree whether certain claims are definite. Counsel informed me that indefiniteness means whether the claims, in light of the specification and prosecution history, inform a POSITA about the scope of the invention with reasonable certainty.

27. I have been asked for my opinion as to whether the claim terms described below are definite under these standards. As described below, it is my opinion that all of the claims are definite because they satisfy these standards.

28. The following are the claim terms that ResMed alleges are indefinite, because of the terms "symptom data," "severity of the sleep disorder symptoms," "index of a subject's symptoms," "treatment efficacy," and "therapy efficacy data:"

Patent & Claims	Disputed Claim Language
'921 Patent: Claims 1, 7, 12	<p>Term 3 – “generating and outputting the data related to the subject’s treatment and the treatment’s efficacy by receiving sensor data from the airflow sensor, and calculating both the quantified symptom data of the severity of the sleeping disorder symptoms and/or an index of a subject’s symptoms measured during use of the PAP device, and data of usage of the PAP device”</p> <p>Term 4 – “measuring and calculating a data of a quantitative output of the severity of a subject’s sleeping disorder symptoms during a treatment and further providing for a data related the subject’s treatment and the treatment’s efficacy”</p>
'029 Patent: Claim 1	<p>Term 5 – “calculating: i) the data of a severity of the sleep disorder symptoms of the subject, ii) the data of usage of the PAP device by the subject, and/or iii) the index based in whole or in part on either i) or ii) or both i) and ii)”</p> <p>Term 6 – “related to the subject’s treatment and the treatment’s efficacy”</p>
'333 Patent: Claim 15	<p>Term 7 – “transmitting, in either order, both 1) the collected data and/or the quantified level of severity data to a cellular phone via a radio frequency wireless link; and 2) the collected data and/or the quantified level of severity data to the remote station from either a) the PAP or CPAP device via a cellular system, or b) the cellular phone to a remote station via the cellular system or the Internet for further analysis with a second processor or a server at the remote station and review of the collected data, the quantified level of severity and/or this analysis by a clinician, technician or physician”</p> <p>Term 8 – “the therapy efficacy data”</p>

29. In a clinical sleep laboratory setting, a person of ordinary skill in the art (POSITA) would understand the terms used in the claims noted above consistent with their plain and ordinary meaning. Because these terms are well understood by persons of skill within the sleep industry, the claims inform a person of skill as to what is being claimed.

30. Within the clinical sleep study and treatment field, the term “symptom data” has definite meaning. Clinical professionals understand that “symptom data” refers to the physiological and technological data indicative of the patient’s condition while they sleep or attempt to sleep. Since the time of invention, I have personally used this term when discussing the diagnosis and treatment of a patient’s sleeping disorder with colleagues in various clinical settings.

31. The different sensors used to monitor and diagnose a patient result in different types of symptom data that is calculable. ’921 Patent at 3:4-24; 6:10-8:30. For example, based on Claim 12’s use of an internal airflow sensor, one would use the term “symptom data” to refer to at least the patient’s: airflow, inhalation pressure, exhalation pressure, apnea events, hypopnea events, I:E ratio. *See* ’921 Patent at Claim 12; 7:61-8:12. When looking at Claims 1 and 7, “symptom data” would refer to those data points identified above and also include pulse and SpO₂ due to the inclusion of the pulse oximeter into the system. ’921 Patent at Claims 1, 7; 8:13-25.

32. Based upon the disclosures in the ’921, ’029 and ’333 Patents, a POSITA understands how to calculate the symptom data in order to derive the severity of the patient’s symptoms. ’921 Patent at 18:51-21:67; ’333 Patent at 22:36-24:45, 45:34-46:51; ’029 Patent at 18:66-22:13. Since the time of the invention, a commonly used term within the clinical sleep setting has been “level of severity” which clinicians understand to represent the how dire a patient’s calculated symptom data may be. For example, a clinician would recognize a patient’s symptom’s as severe if their data shows a respiratory disturbance index (RDI) or apnea-hypopnea index (AHI) of greater than or equal to 30 events per hour of sleep. The RDI is the sum of all the apneas, hypopneas, and Respiratory Effort Related Arousals (RERAs)

divided by total sleep time. The AHI is the sum of all the apneas and hypopneas divided by the total sleep time. RERAs include arousals from sleep in the definition. Hypopneas include oxygen desaturation of equal to or greater than 4% from the baseline oxygen saturation associated with a reduction in airflow limitation. Clinically, both the RDI and AHI can be used to determine severity but Medicare only recognizes AHI. The denominator in these indices is total sleep time. Any of the measures themselves can be of concern and indicate severity of illness. Severe reduction in airflow, very high numbers of obstructive apneas, oxygen saturations below 88% sustained for 5 minutes or greater are all concerns for severe symptoms. However, they are most often considered together to evaluate severity of illness.

33. Another calculation a sleep clinician would commonly expect the symptom data to be compiled and presented is in the form of an “index.” ’921 Patent at Claims 1, 7, 12; ’029 Patent at Claim 1. An index takes individual and combined symptom data points and averages them over a one-hour period of sleep. For example, if a patient sleeps seven hours and has 70 total instances where they cease breathing (apnea events) or present shallow breathing (hypopnea), they would have an apnea-hypopnea index (AHI) of 10, which a sleep clinician interpret as being mildly elevated but some clinicians would consider this still in the normal range. If instead that patient had 175 total apnea and hypopnea events in seven hours of sleep, a sleep clinician would understand the patient’s AHI to be 25 and in a moderate severity range.

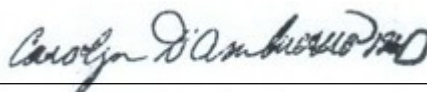
34. Within the clinical sleep study and treatment field, the terms “treatment’s efficacy” and “therapy efficacy data” have definite meaning. Since the time of the invention, I have personally used these terms when discussing the diagnosis and treatment of a patient’s sleeping disorder with colleagues in various clinical settings. Clinical professionals understand that “treatment’s efficacy” is closely related with the level of severity of the patient’s

symptoms, which, as discussed above, are calculated from data collected while the patient is undergoing treatment and represent the how dire a patient's calculated symptom data may be.

35. Clinical professionals understand the term "therapy efficacy data" to be data based on the severity of a patient's sleep disorder symptoms, calculated from data collected while the patient is undergoing treatment, that determines whether the PAP device needs to be adjusted. The '333 Patent specification provides detailed descriptions '333 Patent at 2:31-62 (describing that the object of the '333 Patent is to "adjust the treatment gas flow or pressure delivered to the subject based on the subject's current physiological state or symptoms"), 4:14-39 (adjusting PAP or CPAP device based on robust data collected), 5:28-31 (adjusting device "to effectively treat the subject's sleep-related breathing disorder"), 24:46-53 (diagnostic device provides output which is used to adjust the treatment device), 27:3-10 (system processing signals and adjusting the flow of gas provided to the subject), 46:52-60 (adjusting pressure of CPAP device based on measured airflow, respiratory effort, and blood oxygen concentration), 48:11-42 (adjusting the system according to central-based apnea).

36. Therefore, it is my opinion these claim limitations are definite because a person of skill within the sleep industry would understand each of these claim terms and their calculations with reasonable certainty in order to ascertain the scope of the claimed invention.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on November 25, 2024, in Boston, Massachusetts.



Carolyn M. D'Ambrosio, MS, MD

CERTIFICATE OF SERVICE

I hereby certify that on November 25, 2024, a complete copy of the foregoing
**DECLARATION OF CAROLYN M. D'AMBROSIO, M.S., M.D. IN SUPPORT OF
DEFENDANT AND COUNTERCLAIM PLAINTIFF CLEVELAND MEDICAL
DEVICES, INC.'S OPENING CLAIM CONSTRUCTION BRIEF** was served via
electronic mail upon the following counsel of record for Plaintiff ResMed Corp.:

Michael R. Reed
Elise K. Yarnell
Hahn Loeser & Parks, LLP
65 East State Street, Suite 2500
Columbus, Ohio 43215
T: 614.233.5165
F: 614.221.5909
mreed@hahnlaw.com
eyarnell@hahnlaw.com

Angela C. Whitesell
Brian Biggs
Matthew Middleton
DLA PIPER LLP (US)
1201 Market Street, Suite 2100
Wilmington, DE 19801-1147
angela.whitesell@us.dlapiper.com
brian.biggs@us.dlapiper.com
matthew.middleton@us.dlapiper.com

Sean Cunningham
Tiffany Miller
David Knudson
DLA PIPER LLP (US)
401 B Street, Suite 17
San Diego, CA 92101-4297
sean.cunningham@dlapiper.com
tiffany.miller@dlapiper.com
david.knudson@dlapiper.com

Nancy Braman
DLA Piper LLP (US)
33 Arch Street, 26th Floor
Boston, MA 02110
Nancy.braman@us.dlapiper.com

Attorneys for Plaintiff
ResMed Corp.

By: /s/ Timothy Laden
Timothy Laden
KRAMER LEVIN NAFTALIS
& FRANKEL LLP
333 Twin Dolphin Drive, Suite 700
Redwood Shores, CA 94065
Telephone: (650) 752-1700
Facsimile: (650) 752-1800
tladen@kramerlevin.com

Exhibit 1

**Harvard Medical School
Curriculum Vitae**

Date Prepared: November 25, 2024

Name: Carolyn M. D'Ambrosio, M.D., M.S.

Office Address: Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115

Home Address: 11 Fox Run Road, Dover, MA 02030

Work Phone: (617)983-7280

Work Email: cdambrosio@bwh.harvard.edu

Work Fax: (617)983-2488

Place of Birth: Elmira, NY

Education

9/81 – 5/85	BA	Biological Sciences	Cornell University, Ithaca, NY
9/85 – 5/88	MS	Physiology	George Washington University, Washington, DC
9/87 – 5/91	MD (<i>with distinction in research</i>)	Medicine	George Washington University School of Medicine, Washington, DC

Postdoctoral Training

6/91 – 6/92	Intern	Medicine	University of Rochester, Strong Memorial Hospital, Rochester, NY
6/92 – 6/94	Resident	Medicine	University of Rochester, Strong Memorial Hospital
6/94 – 6/95	Chief Resident	Medicine	University of Rochester, Strong Memorial Hospital
7/95 – 6/99	Fellow	Pulmonary and Critical Care Medicine	Yale University School of Medicine, New Haven, CT

Faculty Academic Appointments

7/99 – 6/00	Instructor	Medicine	Yale University School of Medicine
7/00 – 12/00	Assistant Professor	Medicine	Yale University School of Medicine
12/00 – 8/08	Assistant Professor	Medicine	Tufts University School of Medicine, Boston, MA
8/08 – 12/14	Associate Professor	Medicine	Tufts University School of Medicine
1/15 – 6/17	Member of Faculty	Medicine	Harvard Medical School, Boston, MA
6/17 – 6/23	Associate Professor	Medicine	Harvard Medical School, Boston, MA

7/21-6/24	Associate Professor	Medicine	Yale University School of Medicine
7/23-	Lecturer		Harvard Medical School, Boston, MA

Appointments at Hospitals/Affiliated Institutions

7/99 – 12/00	Staff Physician	Pulmonary Medicine	Yale-New Haven Hospital, New Haven, CT
7/99 – 12/00	Staff Physician	Pulmonary Medicine	Gaylord Hospital, Wallingford, CT
7/99 – 12/00	Staff Physician	Pulmonary Medicine	Veterans Administration (VA)-Connecticut Healthcare System, Newington, CT
12/00 – 12/14	Consulting Physician	Pulmonary Medicine	Winchester Hospital, Winchester, MA
12/00 – 12/14	Consulting Physician	Pulmonary Medicine	New England Sinai Hospital, Stoughton, MA
12/00 – 12/14	Staff Physician	Medicine / Pulmonary	Tufts Medical Center, Boston, MA
9/01 – 7/12	Staff Physician	Medicine / Sleep	Saints Medical Center, Lowell, MA
12/02 – 7/03	Staff Physician	Pulmonary	Waltham Hospital, Waltham, MA
11/04 – 7/05	Staff Physician	Medicine / Pulmonary	Morton Hospital, Taunton, MA
7/12 – 12/14	Staff Physician	Medicine / Pulmonary	Lowell General Hospital and Saints Medical Center, Lowell, MA
1/15 -07/21	Physician	Pulmonary and Critical Care Medicine	Brigham and Women's Hospital
01/21-present	Physician	Sleep Medicine	Brigham and Women's Hospital
07/21-6/24	Physician	Pulmonary and Critical Care Medicine	Yale School of Medicine

Major Administrative Leadership Positions

Local

7/99 – 12/00	Director, Outpatient Pulmonary Services	Veterans Administration-Connecticut Healthcare System
7/99 – 12/00	Director, Sleep Medicine Services	Veterans Administration-Connecticut Healthcare System
2000	Director and Lecturer, Yale Sleep Symposium	Yale New Haven Hospital
12/00 – 12/14	Director, Sleep Medicine	Tufts Medical Center
12/02 – 7/03	Director, Sleep Center	Waltham Hospital
2003	Co-Director and Lecturer, Symposium Recent Advances in Critical Care and Sleep Medicine	Tufts-New England Medical Center
2005 - 2007	Director and Lecturer, 7 th , 8 th , 9 th Annual Conference in Mechanical Ventilation	Tufts-New England Medical Center
11/05 – 6/07	Director, The Sleep Disorders Laboratory	Morton Hospital
5/07 – 5/13	Associate Program Director, Internal Medicine Residency Program	Tufts Medical Center
5/07 – 5/13	Organizer, Morbidity and Mortality Conference	Department of Medicine, Tufts Medical Center
9/07 – 5/14	Course Director, Medical Grand Rounds	Tufts Medical Center

9/01-12/14	Course Director, Pulmonary and Critical Care Lecture Series	Tufts Medical Center
5/07-5/13	Chair, Internal Medicine Residents' Mentorship Program	Tufts Medical Center
9/07 – 12/14	Course Director, Ethics Grand Rounds	Tufts Medical Center
1/15 – 07/21	Program Director, Harvard Brigham and Women's Pulmonary and Critical Care Medicine Fellowship Program	Brigham and Women's Hospital
1/15-07/21	Course Director, Pulmonary Grand Rounds	Brigham and Women's Hospital
1/15-07/21	Pulmonary Leader, Infectious and Immunologic Affinity Group, Lung Center	Brigham and Women's Hospital
1/15-07/21	Section Leader, Women's Lung Center	Brigham and Women's Hospital
06/15-	Senior Ethics Consultant	Brigham and Women's Hospital
1/16 -07/21	Course Director, Multidisciplinary Critical Care Curriculum	Brigham and Women's Hospital
11/20-10/22	CHEST Sleep Medicine Board Review Vice Chair	American College of Chest Physicians
07/21-06/24	Vice Chief for Fellowship Education Medicine and Training, Pulmonary, Critical Care, and Sleep Medicine Section	Yale University School of
01/22-01/24	Sleep Medicine Network, Chair	American College of Chest Physicians
11/22-present	CHEST Sleep Medicine Board Review Chair	American College of Chest Physicians

Committee Service

Local

7/06 –12/14	Ethics Committee	Tufts Medical Center
9/07 – 12/14		Chair
7/07 – 5/13	Curriculum Committee	Tufts Medical Center
9/07 – 5/13	Residency Competence Committee	Member
1/08 – 10/13	Medical Executive Committee	Tufts Medical Center
10/10 – 10/13	Women in Medicine Committee	Member
10/11 – 10/12		Tufts Medical Center
10/12 – 10/13		Chair Elect
1/15 -2021	Partners Internal Review Board	Chair
1/15-2021	Lung Center Education Committee	Brigham and Women's Hospital/Partners Health care
2015 -present	Ethics Committee	Member
2015 - 2021	Evaluation and Feedback Subcommittee – Partners Education Committee	Brigham and Women's Hospital
		Member
		Brigham and Women's Hospital
		Member
		Partners Healthcare Systems

2017 - 2020	2015- BWH Executive Committee on Teaching and Education	Member Brigham and Women's Hospital Member
2017 - 2020	BWH Executive Committee on Teaching and Education	Partners Healthcare Member
2021-2024	Yale Pulmonary, Critical Care, Sleep Medicine Section Executive Committee	Yale School of Medicine
National		
2017 – 2019	Women's Health Network	American College of Chest Physicians Chair
2017 - 2022	Executive Committee for the Council of Networks	American College of Chest Physicians Member at Large
2018-2023	Executive Scientific Programming Committee	American College of Chest Physicians, CHEST Annual Meeting
2018-2024	Women and Pulmonary Advisory Board	American College of Chest Physicians Founder and Board Member
2019-2023	Scientific Presentation and Awards Committee	American College of Chest Physicians, CHEST Annual Meeting
2020-present	CHEST Foundation Awards Committee	American College of Chest Physicians
2020-present	CHEST Foundation Board of Trustees	American College of Chest Physicians
2021-2024	CHEST Foundation	Women and Pulmonary Committee, Chair
2021-present	CHEST Foundation and American Thoracic Society	Research Grant COVID-19 and Diversity Committee, Chair
2022-2024	CHEST Sleep Network Chair	American College of Chest Physicians
2022-present	CHEST Foundation Board of Trustees Awards Committee Vice Chair	American College of Chest Physicians

Professional Societies

1988-	Sigma Xi	Member
1996 -	American Thoracic Society	
	2004 – 2005	Member, Critical Care Assembly Scientific Programming Committee
	2005	Member, Critical Care Assembly Abstract Review Committee
	2011 -2014	Member, Training Committee
1996 -	American College of Chest Physicians	Member
	2004	Fellow

2012 -2020		Member, Women’s Health Network Steering Committee
2012 -2024		Member, Sleep Medicine Network Steering Committee
2012 -2018		Session Chair, End-of-Life Care in the Intensive Care Unit (ICU): Cultural Complexities Symposium
2013 -2018		Session Chair, Sleep Deprivation and Restricting Resident Work Hours: Impact on Medical Errors, Transitions of Care, Professionalism and Attending Physician Performance
2015 - 2017		Vice Chair, Women’s Health Network Steering Committee
2016 -2017		Session Chair, Bridging the Gap: ICU to home transition in patients with overlapping respiratory failure and sleep-disordered breathing
2016 -2017		Session Chair, Update on Women’s Health
2016 -2017		ASV: What is it good for?
2017 – 2019		Executive Committee of the Council of Networks
2017-2019		Chair, Women’s Health Network Steering Committee
2018-2024		Women and Pulmonary Steering Committee
2019-present		Scientific Presentations and Awards Committee
2022-2024		Sleep Medicine Network, Chair
1999 -	American Academy of Sleep Medicine	Member
	2000 – 2003	Member, Accreditation Committee
	2004	Fellow
	2005 – 2009	Chair, Sleep-Related Breathing Section
1999 -	Society of Critical Care Medicine	Member
2000 -	Massachusetts Medical Society	Member
2007 – 2013	Association of Program Directors in Internal Medicine	Member
2010 -2021	Massachusetts Sleep Society	Founding Member
	2010 -	Board Member
	2013-2014	Course Director, Annual Conference
	2014 -2016	President
2010 -	Society of Anesthesiology and Sleep Medicine	Founding Member
	2011 -	Member, Abstract Review Committee
2016 -2021	The Academy at Harvard Medical School	Harvard Medical School Member

Editorial Activities*Ad hoc* reviewer:

Intensive Care Medicine
 American Journal of Kidney Disease
 Sleep
 Chest
 New England Journal of Medicine
 New England Journal of Medicine Evidence
 Journal of Maternal-Fetal & Neonatal Medicine
 Journal of Perinatal Medicine
 American Journal of Critical Care
 American Journal of Respiratory and Critical Care

Editorial Roles

2003	Guest Editor	Chronobiology and Shiftwork. Clinics in Occupational and Environmental Medicine, Vol 3, No. 2. Philadelphia: W. B. Saunders (a division of Elsevier Science); May 2003.
2013-2014-	Editorial Board	Austin Journal of Pulmonary and Respiratory Medicine
	Editorial Board	CHEST SEEK (CHEST SEEK is a case-based question-and-answer product designed to challenge clinical thought processes in recall, interpretation, and problem-solving skills. This is a live learning tool that is updated annually.)
2014	Guest Editor	Sleep-Disordered Breathing: Beyond Obstructive Sleep Apnea. Clinics in Chest Medicine, Vol. 35, No. 3. Philadelphia: Elsevier Science; Sept. 2014.
2019-present	Editorial Board	US Respiratory and Pulmonary Diseases Touch Medical Media, UK
2020-present	Editorial Board	CHEST Physician, American College of Chest Physicians
2023-present	Associate Editor	CHEST Pulmonary, American College of Chest Physicians

Honors and Prizes

1987	William T. Gill Fellowship	George Washington School of Medicine	Research
1988	Sigma Xi	George Washington School of Medicine	Research
2004	Teaching Award	Internal Medicine Residency Program, Tufts New England Medical Center	Teaching
2006	Best of ATS lectures	American Thoracic Society International Conference, San Diego, CA	
2008	Notable Teaching Award	Tufts University School of Medicine	
2011 – 2012	Best Lecturer	Tufts University School of Medicine	
2014	Distinguished Teaching Award	Tufts Medical Center	
2017	Distinguished CHEST Educator Award	The American College of Chest Physicians	
2018	Distinguished CHEST	The American College of Chest Physicians	

2019	Educator Award Distinguished CHEST Educator Award	The American College of Chest Physicians
2020	Distinguished CHEST Educator Award	The American College of Chest Physicians
2020	Pillar Award for Educational Program Leadership,	Mass General Brigham.
2021	Distinguished CHEST Educator Award	The American College of Chest Physicians
2022	Distinguished CHEST Educator Award	The American College of Chest Physicians
2023	Distinguished CHEST Educator Award	The American College of Chest Physicians
2023	Outstanding Medical Educator, Association of Pulmonary and Critical Care Program Directors.	
2024	Distinguished CHEST Educator Award	The American College of Chest Physicians
2024	Outstanding Educator of the Year, Section of Pulmonary, Critical Care and Sleep Medicine, Yale School of Medicine.	
2024	Distinguished Service Award	The American College of Chest Physicians

Report of Funded and Unfunded Projects

Funding Information

Past

- 2001 – 2006 Title: Obstructive Sleep Apnea (OSA) in Kidney Transplantation
Paul Teschan Research Fund
Co-Principal Investigator (Co-PI) \$50,000/year
The goal of this grant was to evaluate sleep disordered breathing pre and post kidney transplant.
- 2006 – 2008 Title: Obstructive sleep apnea during recovery of patients undergoing minimally invasive gastric bypass surgery

Sentec Corp
Co-PI \$20,000/year
The goal of this grant was to evaluate sleep and breathing in the immediate post-operative hours after lap-band surgery for obesity

Unfunded Projects

- 2011 -2015 Co-PI / The Role of Optimal Treatment for Pulmonary Arterial Hypertension in alleviating Sleep-Disordered Breathing
The purpose of this project is to assess if optimizing therapy for pulmonary hypertension (and thereby reducing volume overload) has an effect on sleep disordered breathing
- 2012 -2014 Co-PI / The Effects of Dexmedetomidine on Sleep during Non-Invasive Ventilation (NIV) for Acute Respiratory Failure
The purpose of this project is to evaluate the effect dexmedetomidine on sleep architecture for patients who are started on NonInvasive Ventilation for acute respiratory failure. The hypothesis is that dexmedetomidine helps the patient sleep better and tolerate NIV

- 2012 -2014 Co-PI / Validating Snoring, Tiredness, Observed Apnea, Blood Pressure, Body Mass Index, Age, Neck Circumference and Gender (STOP-BANG) in a referral population for Obstructive Sleep Apnea
STOP-BANG is a validated questionnaire to identify patients at risk for OSA in the pre-operative setting. We aim to evaluate its usefulness in a population of people referred for sleep testing for presumptive OSA.
- 2016 - EMERALD-COPD Site Leader: Observational prospective study of objective and subjective measures in outpatients with chronic obstructive pulmonary disease to assess clinical deterioration.
- 2019-2022 AHRQ funded project on Outcomes of Treatment of Obstructive Sleep Apnea in the Medicare Population. Sleep Medicine expert.

Report of Local Teaching and Training

Teaching of Students in Courses

1997 - 2000	Pulmonary Pathophysiology Course Physician Assistant Students	Yale University School of Medicine 1 1hr session/yr
1998 – 2000	Primary Care Asthma Core Curriculum 3 rd Year Medical Students	Yale University School of Medicine 1 1hr session/day x 2 weeks/yr
1999 – 2000	Doctor-Patient Relationship Course 1 st Year Medical Students	Yale University School of Medicine 1 2hr session/week/yr
2001 - 2014	Pulmonary Pathophysiology Course 2 nd Year Medical Students	Tufts University School of Medicine 10 1hr sessions/yr
2003 - 2014	Psychiatry Pathophysiology Course 2 nd Yr Medical Students	Tufts University School of Medicine 1 1hr session/yr
2005 – 2010	Growth and Wellness Course 1 st Year Medical Students	Tufts University School of Medicine 1 1hr session/yr
2008 - 2014	Ethics and Professionalism 1 st , 2 nd Yr Medical Students	Tufts University School of Medicine 10 1hr sessions/yr
2012 - 2023	Health and Wellness 1 st Year Medical Students	Tufts University School of Medicine 2 1hr sessions/yr
2013 - 2014	Health and Human Rights Week 1 st , 2 nd Yr Medical Students	Tufts University School of Medicine 1 4hr session
2015	Integrated Human Physiology IN7520 <u>1st yr Medical Students</u>	Harvard Medical School <u>1 1hr session</u>
2020-2021	Respiratory Control and Sensation 1 st yr Harvard-MIT Health Sciences & Technology Students	Harvard Medical School 1 1hr session

Formal Teaching of Residents, Clinical Fellows and Research Fellows (post-docs)

1999 – 2000	Sleep Disordered Breathing – Summer Lecture Series	Yale-New Haven Hospital
-------------	---	-------------------------

	Pulmonary and Critical Care Medicine (PCCM) Fellows	1 1hr session/yr
2001 - 2014	Morning Report Internal Medicine Residents	Tufts Medical Center 1 1hr session/month/yr
2001 - 2014	Control of Breathing – Summer Lecture Series PCCM Fellows	Tufts Medical Center 1 1hr session/yr
2001 - 2014	Obesity Hypoventilation and OSA – Summer Lecture Series PCCM Fellows	Tufts Medical Center 1 1hr session/yr
2005 - 2014	Critical Care Lecture Series Internal Medicine Residents	Tufts Medical Center 4 1hr sessions/yr
2005 - 2014	Psychiatry Sleep Medicine Lecture Series Internal Medicine Residents	Tufts Medical Center 1 1hr session/yr
2009 - 2014	Sleep Medicine Lecture Series Sleep Medicine Fellow(s)	Tufts Medical Center 1 1hr session/month/yr
2015-	Critical Care Lecture Series	Brigham and Women’s Hospital 1 1 hr session/month/yr
2016 – 2017	Ambulatory Conferences Internal Medicine Residents	Brigham and Women’s Hospital 7 1hr sessions/yr
2017	Dyspnea	Brigham and Women’s Hospital- Foxboro
2017	Conference for Primary Care	1 1hr session/yr
2015-2021	Clinical Case Conference BWH PulmCCM	Chair, 1 hour weekly conference Brigham and Women’s Hospital

Clinical Supervisory and Training Responsibilities

1999 – 2000	Ambulatory Pulmonary Clinic Preceptor / Yale- New Haven Hospital	1 ½ session/week
1999 – 2000	Ambulatory Sleep Medicine Clinic Preceptor / VA- CT Healthcare System	1 ½ session/week
1999 – 2000	Inpatient Medical Intensive Care Unit (MICU) Supervisor / Yale New Haven Hospital	3 months/yr
1999 – 2000	Inpatient Pulmonary Consult Supervisor / Yale New Haven Hospital	1 month/yr
2001 – 2009	Ambulatory Pulmonary Clinic Preceptor / Tufts Medical Center	1 ½ session/week
2001 - 2014	Inpatient MICU Supervisor / Tufts Medical Center	1-3 months/yr
2001 - 2014	Inpatient Pulmonary Consult Supervisor / Tufts Medical Center	1 month/yr
2001 - 2014	Inpatient Pulmonary Ward Supervisor / Tufts Medical Center	1 month/yr
2001 - 2014	Inpatient Intensive Care Unit Supervisor / Winchester Hospital	1 month/yr
2009 - 2014	Ambulatory Sleep Medicine Clinic Preceptor / Tufts Medical Center	4-8 hrs/week

2015 -2021	Inpatient Pulmonary Consult Service / Brigham and Women’s Hospital	50 hrs/week x 8 weeks/yr
2015 -2021	Ambulatory Care Preceptor / Center for Chest Diseases, Brigham and Women’s Hospital	1.5 sessions/week/yr
2021-present	Ambulatory Care Preceptor/Sleep Medicine, Brigham and Women’s Hospital	0.5 sessions/month/yr
2021-2024	Ambulatory Care Preceptor/ Yale School of Medicine	0.5 sessions/week/yr

Formally Supervised Trainees

- 1991 – 2001 Margaret Pisani, M.D., M.P.H., Associate Professor of Medicine, Yale University School of Medicine
Co-authored 1 article
- 2001 – 2003 Maged Tanios, M.D., M.P.H., Assistant Professor of Medicine, University of California – Los Angeles
American Lung Association grant, chapter publication
- 2001 – 2003 Jennifer Papa-Kanaan, M.D., Assistant Professor of Medicine, University of Connecticut School of Medicine, Farmington, CT
Trained in Sleep Medicine, Board Certified in Sleep Medicine
- 2001 – 2004 Hesam El-Gamal, M.D., Houston, TX
Board certified in Sleep Medicine
- 2003 – 2005 Thomas Rajan, M.D., Bangor, ME
Board certified in Sleep Medicine
- 2005 – 2006 Kelvin Lam, M.D., Seattle, WA
Board certified in Sleep Medicine; chapter publication
- 2005 – 2007 Victor Chung, M.D., Fellow, University of Chicago, Plastic Surgery
Research grant from Sentec Corp; one abstract
- 2007 – 2009 Aylin Oszancyck, M.D., Pulmonologist, Istanbul, Turkey
1 publication
- 2008 – 2009 Khalid Ismail, M.D., Assistant Professor of Medicine, Tufts University School of Medicine
Board certified in Sleep Medicine
- 2009 – 2010 Layola Lunghar, M.D., Norwood, MA
Board certified in Sleep Medicine; chapter publication
- 2010 – 2011 Farhan Siddiqui, M.D., Spartanburg, SC
Board certified in Sleep Medicine; chapter publication
- 2011 – 2012 Neha Vagadia, DO, Philadelphia, PA
Board certified in Sleep Medicine
- 2012 – 2013 Aarti Grover, M.D., Washington, DC
Trainee, for Sleep Medicine
- 2012 - 2014 Nadine Al-Naamani, M.D., Fellow, Pulmonary and Critical Care Medicine, Tufts Medical Center
Fellow trainee in sleep research – Pulmonary Artery Hypertension (PAH) Obstructive Sleep Apnea (OSA)

Formal Teaching of Peers (e.g., CME and other continuing education courses)*No presentations below were sponsored by outside entities.*

2015, 2016	Critical Care Board Review	1 single talk
	Harvard Intensive Review of Internal Medicine Course	Boston, MA
2016	Sedation, agitation and delirium	1 single talk
	Harvard Intensive Review of Internal Medicine	Boston, MA
2016	Pulmonary Board Review questions	1 single talk
	MOC Course, Brigham and Women's Hospital	Boston, MA
2016	Update in Pulmonary and Critical Care Medicine	1 single talk
	Brigham and Women's Hospital	Boston, MA
2016	Pulmonary MOC	1 single talk
	Brigham Medicine Update, Brigham and Women's Hospital	Boston, MA
2016	Sleep disordered breathing	1 single talk
	Advances in the Practices of Pulmonary and Critical Care Medicine – Harvard Medical School	Boston, MA
2017	Office Practice of Primary Care Medicine	1 single talk
	Harvard Medical School	Boston, MA
2017	Update on Obstructive Sleep Apnea	1 single talk
	Advances in the Practices of Pulmonary and Critical Care Medicine – Harvard Medical School	Boston, MA
2018	Office Practice of Primary Care Medicine	1 single talk
	Harvard Medical School	Boston, MA
	Challenging OSA cases	
2018	Advances in the Practices of Pulmonary and Critical Care Medicine-Harvard Medical School	1 single talk
	Non-invasive Ventilation in Sleep Disordered Breathing	Boston, MA
2019	Critical Care Board Review	1 single talk
	Harvard Intensive Review of Internal Medicine Course	Boston, MA
	Critical Care take home messages and summary.	
2019	Advances in the Practices of Pulmonary and Critical Care Medicine, Brigham and Women's Hospital	1 single talk
	Non-invasive ventilation and sleep disordered breathing.	Boston, MA
2019	Office Practice of Primary Care Medicine	1 single talk
	Harvard Medical School	Boston, MA
	Obstructive Sleep Apnea	
2019	Women's Lung Health Symposium	1 single talk
	Women, OSA and Heart Disease	Boston, MA

Local Invited Presentations*No presentations below were sponsored by outside entities.*

2000	OSA and Anesthesia: What's the risk / Grand Rounds
	Department of Anesthesiology, Yale-New Haven Hospital, New Haven, CT

- 2001 Morbidity and Mortality of Obstructive Sleep Apnea / Medical Grand Rounds
Department of Medicine, Tufts Medical Center, Boston, MA
- 2001 Neurocognitive deficits in patients with OSA/ Grand Rounds
Department of Psychiatry, Tufts University School of Medicine, Boston, MA
- 2003 Obstructive Sleep Apnea, who to test and treat / Grand Rounds
Waltham Hospital, Department of Medicine, Waltham, MA
- 2004 Breathing Easier III, Challenges in Pulmonary Disease / invited talk
Overview of Obstructive Sleep Apnea/Tuft-New England Medical Center and New
England Sinai Hospital Symposium, Boston, MA
- 2004 The Risks of Anesthesia in Patients with Obstructive Sleep Apnea / Grand Rounds
Saints Memorial Medical Center, Lowell, MA
- 2005 Peri-operative Considerations in Patients with OSA / Grand Rounds
Department of Anesthesiology, Tufts-New England Medical Center, Boston, MA
- 2005 Sleep Disorders/Weekly Conference
Department of Rheumatology, Tufts-New England Medical Center, Boston, MA
- 2005 Prevention of Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE) / Grand
Rounds
Department of Orthopedics, Tufts-New England Medical Center, Boston, MA
- 2007 Mistakes in Medicine, How to handle them / Ethics Grand Rounds
All Departments, Tufts-New England Medical Center, Boston, MA
- 2007 Update on OSA / Medical Grand Rounds
Department of Medicine, Tufts-New England Medical Center, Boston, MA
- 2007 Cardiovascular Consequences of OSA / invited talk
Tufts University School of Dental Medicine, Dental Sleep Medicine Seminar, Boston, MA
- 2008 Overview of Sleep Physiology and Obstructive Sleep Apnea / invited talk
Tufts University School of Dental Medicine, Dental Sleep Medicine Seminar, Boston, MA
- 2008 - 2009 Case Presentations / Medical Grand Rounds
Department of Medicine, Tufts-New England Medical Center, Boston, MA
- 2010 Update on OSA / General Medical Associates Clinical Conference
Department of Medicine, Tufts Medical Center, Boston, MA
- 2010 - 2012 Case Presentations / Medical Grand Rounds
Department of Medicine, Tufts Medical Center, Boston, MA
- 2011 Case Reports from the Consult Service / Ethics Grand Rounds
All Departments, Tufts Medical Center, Boston, MA
- 2011 Polysomnography in Infants / Department of Newborn Medicine Conference
Floating Hospital for Children/Tufts Medical Center, Boston, MA
- 2012 Cultural issues surround end of life decisions / Ethics grand rounds,
Tufts Medical Center
- 2012 Sleep in Patients with Rheumatologic Conditions / Grand Rounds
Rheumatology Division, Tufts Medical Center, Boston, MA
- 2012 Upper Airway Resistance Syndrome / invited talk
Mini Residency Program for Sleep Medicine, Tufts Dental School, Boston, MA
- 2012 Pediatric Obstructive Sleep Apnea / invited talk
Mini Residency Program for Sleep Medicine, Tufts Dental School, Boston, MA
- 2013 Sleep Deprivation and its impact on patients, healthcare providers and the public / Grand
Rounds
Department of Obstetrics and Gynecology, Tufts Medical Center, Boston, MA

- 2013 What's new with Diagnosis and Treatment of Upper Airway Resistance Syndrome (UARS) / invited talk
Mini Residency Program for Sleep Medicine, Tufts Dental School, Boston, MA
- 2013 Update on Pediatric Sleep Apnea / invited talk
Mini Residency Program for Sleep Medicine, Tufts Dental School, Boston, MA
- 2013 Cardiovascular Consequences of OSA / invited talk
Mini Residency Program for Sleep Medicine, Tufts Dental School, Boston, MA
- 2014 Home sleep testing: Where are we now? / Pulmonary Grand Rounds
Pulmonary and Critical Care Medicine, Brigham and Women's Hospital
- 2015 Sleep and Wellness in the Transplant Population / invited talk
Lung Transplant Support Group, Brigham and Women's Hospital, Boston, MA
- 2017 Update in Obstructive Sleep Apnea
Brigham and Women's Faulkner Hospital Grand Rounds, Boston, MA
- 2019 Upper Airway Resistance Syndrome in Children. Tufts Dental School
Mini-Residency in Sleep Apnea, Boston, MA

Report of Regional, National and International Invited Teaching and Presentations

No presentations below were sponsored by outside entities.

Invited Presentations and Courses

Regional

- 2000 Common Sleep Disorders / Medical Grand Rounds
Department of Medicine, Mid-State Medical Center, Middletown, CT
- 2000 Neurocognitive deficits in patients with OSA / Grand Rounds, Department of Psychiatry.
New York Medical College, Yahalla, NY
- 2001 New Advances in Treatment of Obstructive Sleep Apnea / Medical Grand Rounds
Carney Hospital, Boston, MA
- 2002 Pediatric OSA / Sleep Center Weekly Conference
Department of Medicine, Psychiatry and Neurology, Lahey Clinic, Burlington, MA
- 2005 Sleep Disorders, Update / Grand Rounds
Carney Hospital, Quincy, MA
- 2005 Insomnia and OSA/ Grand Rounds
Cooley-Dickenson Hospital, Northampton, MA
- 2005 Sleep in Critically Ill Patients / Grand Rounds
Department of Medicine, Windham Hospital, Willimantic, CT
- 2005 Sleep in the Intensive Care Unit (ICU) / invited talk
North East Sleep Society Annual Conference, Stamford, CT
- 2006 Continuous Positive Airway Pressure (CPAP) versus Auto-CPAP / invited talk
Tufts-New England Medical Center and New England Sinai Hospital Symposium,
Breathing Easier V, Critical Illness Beyond the ICU, Norwood, MA
- 2007 Sleep Deprivation: how it affects our patients and ourselves / invited talk

2008 Pennsylvania Respiratory Society Annual Meeting, Pittsburgh, PA
Home Sleep Studies Pro / Debate
North East Sleep Society Meeting, Hartford, CT

2008 The Risk of Anesthesia in Patients with Obstructive Sleep Apnea / invited talk
North East Sleep Society Meeting, Hartford, CT

2008 Peri-Operative Complications in patient with OSA / invited talk
Massachusetts Dental Society of Anesthesiology Annual Meeting, Newton, MA

2009 What is a Hypopnea? / invited talk
North East Sleep Society Meeting, Newton, MA

2009 Anesthesia and OSA / Anesthesia Grand Rounds
Beth Israel Deaconess Medical Center, Boston, MA

2009 Diagnosis and Management of Obstructive Sleep Apnea / Grand Rounds
Jordan Hospital, Plymouth, MA

2010 Sleep Deprivation: its effects on Healthcare workers and patients / Grand Rounds
Hospital of Saint Raphael, New Haven CT

2011 Pediatric Sleep Disorders / Sleep Grand Rounds
Lahey Clinic, Burlington, MA

2012 Technologist vs Autotitrating CPAP: what is the difference? / invited talk
New England Polysomnographic Society conference Nashua, NH

2013 Medical Ethics and Risk Management / Grand Rounds
Lowell General Hospital, Lowell, MA

2013 What have we learned about Home Sleep Testing in Massachusetts and what to expect for
the future / invited talk
New England Polysomnographic Society Conference, Danvers, MA

2013 Challenges with Home Sleep Testing and Automatic Positive Airway Pressure (APAP),
Future Directions / invited talk
Massachusetts Sleep Society Annual Meeting, Newton, MA

2014 Home Sleep Testing and Auto Continuous Positive Airway Pressure (CPAP): where are
we now and where are we going? / Pulmonary Grand Rounds
Brigham and Women's Hospital, Boston, MA

2014 Peri-Operative Management of Patients with Obstructive Sleep Apnea / invited talk
New England Sleep Society Annual Meeting, Newton, MA

2014 Pediatric case discussion / invited talk
New England Polysomnographic Society Annual Meeting, Portsmouth, NH

2015 Low Thyroid (T) to High Thyroid Stimulating Hormone (TSH): The Relationship of Sleep
and Endocrine Function / Grand Rounds
Department of Medicine, Stamford Hospital Grand Rounds, Stamford, CT

2015 Pediatric Sleep Issues / invited talk
New England Polysomnographic Society Annual Meeting, Mashantucket, CT

2016 Rare sleep disorders / invited talk
New England Polysomnographic Society, CT

2017 Obstructive Sleep Apnea Pathophysiology and Treatment / invited talk
Mini Residency Program for Sleep Apnea, Tufts Dental School, Boston, MA

2017 Upper Airway Resistance Syndrome (UARS): What is it and how to treat it? / invited talk
Mini Residency Program for Sleep Apnea, Tufts Dental School, Boston, MA

2017 Pediatric Sleep Cases

2020 OSA in Women. New England Baptist Hospital Grand Rounds, Boston MA

- 2021 Hypersomnia in Brain Injury, Brain Injury and Stroke Conference 2021. Virtual, New Hampshire.
- 2024 Sex and Gender Influences on Obstructive Sleep Apnea, Eastern Pulmonary Conference, Palm Beach FL.

National

- 2001 Complications of Anesthesia in patients with OSA / Sunrise seminar
American Thoracic Society (ATS) International Conference, San Francisco, CA
- 2006 Sleep: Why it is important in our critically ill geriatric patients / symposium
American Thoracic Society International Conference, San Diego, CA
- 2007 Effects of Sleep Deprivation on Nurses and Healthcare Workers / invited talk
Focus Conference for Respiratory Therapists, Sleep Technologists and Nurses, Nashville, TN
- 2007 Sleep in Mechanically Ventilated Patients / invited talk
FOCUS Conference for Respiratory Therapists, Sleep Technologists and Nurses, Nashville, TN
- 2010 The Role of Hypnosis in the Management of Obstructive Sleep Apnea / invited talk
Society for Clinical and Experimental Hypnosis Conference, Boston, MA
- 2010 Mitochondrial Myopathies: Emerging Challenges for the Pulmonary, Critical Care and Sleep Physician / invited talk
American Thoracic Society International Conference, New Orleans, LA
- 2012 NIV should be titrated in the sleep laboratory/debate. American College of Chest Physicians
CHEST International Conference, Atlanta, GA
- 2012 Health Disparities and End-of-Life Decision Making in the ICU / invited talk
American College of Chest Physicians CHEST International Conference, Atlanta, GA
- 2012 Impact of Stereotyping on Medical Decision Making in the ICU / invited talk
American College of Chest Physicians CHEST International Conference, Atlanta, GA
- 2013 Home Sleep Testing, the Massachusetts Experience / Meet the Professor
American Thoracic Society International Conference, Philadelphia, PA
- 2013 Average Volume-Assured Pressure Support / invited talk
American College of Chest Physicians CHEST International Conference Chicago, IL
- 2013 Menopause and Sleep-Disordered Breathing / invited Talk
American College of Chest Physicians CHEST International Conference, Chicago, IL
- 2013 Year in Review: Sleep in Neurologic and Medical Conditions / Post-Graduate Course
- 2014 American College of Chest Physicians CHEST International Conference, Chicago, IL
Professionalism. "Resident Boot Camp"/Post-Graduate Course American Thoracic
Society International Conference, San Diego, CA
- 2014 Small Case Discussion: Average Volume-Assured Pressure Support After CPAP Failure /
invited talk
CHEST Symposium, Austin, TX
- 2014 The Language of Sleepiness / invited talk and a Network Highlight Symposium
CHEST Symposium, Austin, TX
- 2014 Restless Leg Syndrome in Pregnancy / invited talk
- 2015 End of Life Discussions. "Resident Boot Camp / Post-Graduate Course
American Thoracic Society International Conference, Denver, CO
- 2015 How to Teach in A Small Group Setting. "Resident Boot Camp / Post-Graduate Course,
American Thoracic Society International Conference, Denver, CO.
- 2015 Sleep Board Review on Demand Course / invited talk

- American College of Chest Physicians, Glenview IL
- 2016 End of Life Discussions, “Resident Boot Camp”/Post-Graduate Course
American Thoracic Society International Conference, San Francisco, CA
- 2016 How to Teach in A Small Group Setting. “Resident Boot Camp”/Post-Graduate Course,
American Thoracic Society International Conference, San Francisco CA
- 2016 Bridging the gap: ICU to home transition in patients with overlapping respiratory failure and
sleep-disordered breathing / invited speaker
CHEST Annual Meeting, Los Angeles, CA
- 2016 How to optimize OSA management for outpatient surgical procedures / invited talk
CHEST Annual Meeting, Los Angeles, CA
- 2016 Update on women’s health / invited talk
CHEST Annual Meeting, Los Angeles, CA
- 2016 ASV: What is it good for? Debate / invited talk
CHEST Annual Meeting, Los Angeles, CA
- 2016 Outfitting your sleep lab and clinic for children / invited talk
CHEST Annual Meeting, Los Angeles, CA
- 2017 Practical end of life Discussions – Resident Boot Camp
Post graduate Course – American Thoracic Society Annual Conference, Washington, DC
- 2017 Women and sleep disordered breathing / invited talk
State Chest Conference, Yale University School of Medicine, New Haven, CT
- 2017 Pediatric Sleep Cases / invited talk
State Chest Conference, Yale University School of Medicine, New Haven, CT
- 2017 Journal Club – Expert Panel
The Assembly on Sleep and Respiratory Neurobiology, American Thoracic Society, Monthly
Webinar Series
- 2018 Diffuse Lung Diseases, moderator
CHEST Annual Meeting, San Antonio, TX
- 2018 What are my options for promoting sleep in the ICU?/co-chair and speaker
CHEST Annual Meeting, San Antonio, TX
- 2018 Nocturnal Oximetry in Pulmonary Practice/co-chair and speaker
CHEST Annual Meeting, San Antonio, TX
- 2018 Evaluating the Sleepy Adolescent in Your Adult Clinic/invited speaker
CHEST Annual Meeting, San Antonio, TX
- 2019 Sleep apps and devices/invited speaker
CHEST Annual Meeting, New Orleans, LA
American College of Chest Physicians
- 2019 Optimizing Care in the ICU, Moderator
CHEST Annual Meeting, New Orleans, LA
American College of Chest Physicians
- 2019 What’s Old is New Again, Oximetry in Practice/Chair and Speaker
CHEST Annual Meeting, New Orleans, LA
American College of Chest Physicians
- 2019 Marijuana and Pregnancy/Co-chair and Speaker
CHEST Annual Meeting, New Orleans, LA
American College of Chest Physicians
- 2019 Inhalational Injuries during Pregnancy/Co-Chair, Experience CHEST presentation
CHEST Annual Meeting, New Orleans, LA
American College of Chest Physicians

- 2019 American College of Chest Physicians, Women and Pulmonary Webinar: Sleep in Women Across the Lifespan, panelist. Glenview, IL
- 2020 Women in Pulmonary Panelist, Virtual meeting
CHEST Annual Meeting, American College of CHEST Physicians
- 2020 The Dilemma of Insomnia in Pregnancy, Speaker, Virtual meeting
CHEST Annual Meeting, American College of CHEST Physicians
- 2020 Nocturnal Oximetry in patients with respiratory disease, Chair and Speaker, Virtual meeting,
CHEST Annual meeting, American College of CHEST Physicians
- 2020 New insights into the relationship between OSA and Cardiovascular Disease in Women
CHEST Annual meeting, virtual, American College of CHEST Physicians
- 2021 Challenges in Diagnosis and Treatment of OSA in Pregnancy, SLEEP annual meeting 2021
(American Academy of Sleep Medicine) virtual meeting
- 2021 American College of Chest Physicians CHEST Sleep Medicine Board Review Course. Virtual
Meeting “Less than 2%” Faculty/invited speaker
- 2021 American College of Chest Physicians CHEST Sleep Medicine Board Review Course. “Sleep
Apnea Phenotypes and Non-PAP Treatment for OSA” Faculty/invited speaker
- 2021 American College of Chest Physicians CHEST Sleep Medicine Board Review Course. “Sleep
and the Endocrine and Gastrointestinal Systems” Faculty/invited speaker
- 2021 American College of Chest Physicians CHEST Annual Meeting, Virtual. “Challenges in
Diagnosis and Treatment of OSA In Pregnancy” Faculty/invited speaker
- 2022 American College of Chest Physicians, CHEST Annual Meeting, Nashville, TN. “Impact of
Variable Access to Termination of Pregnancy on Patients with Pulmonary Disease”
Chair/Faculty/invited speaker
- 2022 American College of Chest Physicians, CHEST Annual Meeting, Nashville, TN. “Obstructive
Sleep Apnea: Sex Distinct Topics and Treatment” Faculty/invited speaker
- 2022 American College of Chest Physicians, CHEST Annual Meeting, Nashville, TN.
“Subspecialty Tracks in Pulmonary, Critical Care and Sleep Medicine Fellowships”
Chair/Faculty/invited speaker
- 2022 American College of Chest Physicians, CHEST Annual Meeting, Nashville, TN. “Grey Areas
in Sleep Medicine: Mild OSA and In-Hospital Testing for OSA” Faculty/invited speaker
- 2022 American College of Chest Physicians, CHEST Annual Meeting, Nashville, TN. “Central
Sleep Apnea: More than Ondine’s Curse.” Chair/Faculty/invited speaker
- 2023 American Academy of Sleep Medicine, “Time to rethink CPAP: A review of the
AHRQ report”. Indianapolis, IN Chair/Faculty/Invited speaker,
- 2023 Association of Pulmonary and Critical Care Program Directors meeting, “Marijuana and
Pregnancy, What’s the Harm?” Portland Oregon invited speaker
- 2023 American College of Chest Physicians, CHEST Sleep Medicine Board Review Course,
Miami, FL. “Non-PAP Therapy for OSA”. Chair/Faculty.
- 2023 American College of Chest Physicians, CHEST Sleep Medicine Board Review Course,
Miami, FL. “Rare Sleep Disorders” Chair/Faculty.
- 2023 American College of Chest Physicians, CHEST Sleep Medicine Board Review Course,
Miami, FL “Changes in Endocrine and Gastrointestinal Systems in Sleep” Chair/Faculty
- 2023 American College of Chest Physicians, CHEST Annual Meeting, Honolulu, HI. “Respiratory
Emergencies in Pregnancy” Faculty/invited speaker.
- 2023 American College of Chest Physicians, CHEST Annual Meeting, Honolulu, HI. “Mentoring
and Career Transitions: Chair/Faculty.
- 2023 American College of Chest Physicians, CHEST Annual Meeting, Honolulu, HI “Obstructive
Sleep Apnea in Women, Update and New Directions” Faculty/invited speaker

- 2024 Methodist Hospital Department of Obstetrics and Gynecology Grand Rounds, Houston, TX. “Challenges in Diagnosis and Management of OSA in Pregnancy.” Invited speaker
- 2024 Association of Pulmonary and Critical Care Program Directors Annual Meeting, Las Vegas, NV. “Mentoring Underrepresented in Medicine Residents, Beyond our walls” Invited speaker.
- 2024 American Medical Women’s Association, Webinar, “Sleep apnea in women across the lifespan” Invited speaker.
- 2024 New York State Thoracic Society meeting, “Sex and Gender Influences in Sleep Disorders” Invited speaker.
- 2024 University of Miami, Department of Medicine Grand Rounds, Miami, FL. “Sex and Gender Influences in Lung Diseases” Invited speaker.
- 2024 American College of Chest Physicians, CHEST Annual Meeting, Boston, MA. Postgraduate course, “Sleep Medicine: Cutting -Edge Insights and Innovations” Co-Chair
- 2024 American College of Chest Physicians, CHEST Annual Meeting, Boston, MA. Postgraduate course, “Emerging Data in Hypersomnia and Sleep-Related Movement Disorders” Invited speaker.
- 2024 American College of Chest Physicians, CHEST Annual Meeting, Boston, MA. “Pardon the Disruption: Controversies in Sleep Medicine” Commentator.
- 2024 American College of Chest Physicians, CHEST Annual Meeting, Boston, MA. “Head Scratchers in Sleep Medicine: Non-respiratory Sleep Related Cases, REM Behavior Disorder” Invited Speaker.

International

- 2015 ICU Protocols: Delirium, Sedation, Sleep? What are the Current Recommendations, Evidence, and Adherence Data? / Chair and speaker
CHEST International Conference, Montreal, Quebec, Canada
- 2017 Women, Sleep and Heart Disease: What is the connection? / plenary session Chair and Speaker
CHEST Annual Meeting, Toronto, Canada
- 2017 Back to basics: Oximetry and Sleep / plenary session Chair and Speaker
CHEST Annual Meeting, Toronto, Canada
- 2020 OSA and Obesity, lecture, speaker
All India Medical Center PULMOCRIT meeting, New Delhi, India
- 2020 MSLT and MWT, lecture, speaker
All India Medical Center PULMOCRIT meeting, New Delhi, India
- 2020 Advanced PAP titration, workshop, chair
All India Medical Center PULMOCRIT meeting, New Delhi, India
- 2020 Nocturnal Oximetry: when it tells you more than the oxygen is low, workshop, chair
All India Medical Center PULMOCRIT meeting, New Delhi India
- 2020 Sleep Scoring and Respiratory Events, lecture, speaker
All India Medical Center PULMOCRIT meeting, New Delhi, India
- 2022 International Society of Obstetric Medicine, Annual Meeting, Toronto, Canada, “Marijuana Use in Pregnancy” Faculty/invited speaker

Report of Clinical Activities and Innovations**Current Licensure and Certification**

1992	New York State Medical License
1995	Connecticut Medical License
1995	American Board of Internal Medicine – Internal Medicine
1997	American Board of Internal Medicine – Pulmonary Disease, recertified 2017
1998	American Board of Internal Medicine – Critical Care Medicine, recertified 2018
2000	Massachusetts Medical License
2002	Rhode Island Medical License
2009	American Board of Internal Medicine – Sleep Medicine, recertified in 2019

Practice Activities

1999 – 2000	Ambulatory Care	Pulmonary and Sleep Medicine, Veterans Administration – Connecticut (VA-CT) Healthcare System	2 sessions/wk
1999 – 2000	Ambulatory Care	Pulmonary and Sleep Medicine, Yale-New Haven Hospital	1 session/wk
1999 – 2000	Inpatient Care	Medical Intensive Care Unit (MICU), Yale-New Haven Hospital	3 months/yr
1999 – 2000	Ambulatory Care	Yale Sleep Center, Yale-New Haven Hospital	5 months/yr
2001 – 2011	Inpatient Care	Pulmonary and Sleep Medicine New England Sinai Hospitals	1 month/yr
2001 - 2014	Ambulatory Care	Pulmonary and Sleep Medicine Tufts Medical Center	1.5 sessions/wk
2001 - 2014	Inpatient Care	MICU, Tufts Medical Center	3 months/yr
2001 - 2014	Inpatient Care	Intensive Care Unit, Winchester Hospital	1 month/yr
2001 - 2014	Inpatient Care	Internal Medicine Inpatient, Tufts Medical Center	1 month/yr
2001 - 2014	Ambulatory Care	Polysomnography Reading, Tufts Medical Center	4-6 months/yr
2015-2021	Ambulatory Care	Fellows' Continuity Clinic, Center for Chest Diseases, Brigham and Women's Hospital	½ day/wk/yr
2015-2021	Ambulatory Care	Women's Lung Center, Brigham and Women's Hospital	½ day/wk/yr
2015 -2021	Inpatient Care	Pulmonary Consult Service, Brigham and Women's Hospital	8 wk/yr
2015-2021	Inpatient Care	Pulmonary Vascular Disease Service, Brigham and Women's Hospital	4 wks/yr
2018-present	Ambulatory Care	Fellows' Continuity Clinic, Sleep Medicine Division, Brigham and Women's Hospital	1 day/month
2021-2024	Inpatient Care	Medical Intensive Care Unit Yale New Haven Hospital	10 weeks per year
2021-2024	Ambulatory Care	Fellows' Continuity Clinic, Pulmonary Medicine Yale New Haven Hospital	18 clinics per year

2015-present	Inpatient Care	Ethics Consult Service Brigham and Women’s Hospital	3-5 days per month
2024-present	Ambulatory Care	Division of Circadian and Sleep Disorders, Brigham and Women’s Hospital	4 clinics per week

Report of Education of Patients and Service to the Community

Activities

No presentations below were sponsored by outside entities.

2004	My Child Doesn’t Sleep / invited talk Presentation to Dover Mothers Association, Dover, MA
2006	Sleep Disorders / invited talk Outreach Program, Saints Medical Center
2008	Insomnia and Sleep Problems / invited talk Outreach Program, Saints Medical Center
2009	Health Sleep Habits / invited talk Public Lecture Series, Wellesley Free Library, Wellesley, MA
2012	Sleep and Health / invited talk Instron Employee Wellness Seminar
2024	Sleep through the Ages/invited talk Kramer Levin LLC parents group, New York, NY.

Recognition

2011	Boston’s Best Doctors	US News and World Report
2016	Boston’s Best Doctors	Boston Magazine
2016	Boston’s Best Doctors	Castle Connelly
2017	Boston’s Best Doctors	Boston Magazine
2017	Boston’s Best Doctors	Castle Connelly
2018	Boston’s Best Doctors	Boston Magazine
2019	Boston’s Best Doctors	Boston Magazine
2020	Boston’s Best Doctors	Boston Magazine
2021	Boston’s Best Doctors	Boston Magazine
2022	Boston’s Best Doctors	Boston Magazine
2023	Boston’s Best Doctors	Boston Magazine

Report of Scholarship

Peer reviewed publications in print or other media

Research Investigations

1. Floor M, Jahangeer S, **D'Ambrosio C**, Alabaster O. Serum gastrin correlation with dietary calcium, fat, and fiber in fischer-344 rats. J Nutrition, 1991; 121(6):863-8.

2. **D'Ambrosio, CM**, Bowman T, Mohsenin M. Quality of life in obstructive sleep apnea. *Chest* 1999; 115(1):123-129.
3. Unruh ML, Levey AS, **D'Ambrosio CM**, Fink NE, Powe NR, Meyer KB. Restless legs symptoms among incident dialysis patients: Association with lower quality of life and shorter survival. *Am J Kidney Dis* 2004; 43:900-909.
4. **D'Ambrosio C**, Stachenfeld NS, Pisani M, Mohsenin V. Sleep, breathing, and menopause: The effect of fluctuating estrogen and progesterone on sleep and breathing in women. *Gender Med* 2005; 2(4):238-245.
5. Trikalinos TA, Ip S, Gowri R, Cepada MS, Balk EM, **D'Ambrosio C**, Lau J. Home diagnosis of obstructive sleep apnea-hypopnea syndrome. Rockville, MD: Agency for Health Care Research and Quality, 2007 Aug 8 PMID: 25473717. (technical assessment report; presents new data)
6. Kothare SV, Vendrame M, Sant JL, Katz ES, **D'Ambrosio C**, Zarowski M. Fall-prevention policies in pediatric sleep laboratories. *J Clin Sleep Med*, 2011 Feb 15;7(1):9-10.
7. Balk EM, Moorthy D, Obadan NO, Patel K, Ip S, Chung M, Bannuru RR, Kitsios GD, Sen S, Lovin RC, Gaylor JM, **D'Ambrosio C**, Lau J. Diagnosis and Treatment of Obstructive Sleep Apnea in Adults. Rockville, MD: Agency for Healthcare Research and Quality (US); 2011 Jul. Report No:11-EHCO52. PMID: 21977519.
8. Ip S, **D'Ambrosio C**, Patel K, Obadan N, Kitsios GD, Chung M, Balk EM. Auto-titrating versus fixed continuous positive airway pressure for the treatment of obstructive sleep apnea. A systemic review with meta-analyses. *Syst Rev* 2012; 1(1):20. doi: 10.1186/2046-4053-1-20. PMID: 22587875
9. Raman G, Zhang Y, Minichiello VJ, **D'Ambrosio C**, Wang C. Tai Chi improves sleep quality in adults: a systematic review and meta-analysis. *J Sleep Dis Ther* 2(6):141. doi: 10.4172/2167-0277.1000141
10. Paruthi S, Brooks LJ, **D'Ambrosio C**, Hall WA, Kotagal S, Lloyd RM, Malow BA, Maski K, Nichols C, Quan SF, Rosen CL, Troester MM, Wise MS. Recommended amount of sleep for pediatric populations: A consensus statement of the American Academy of Sleep Medicine. *J Clin Sleep Med* 2016;12(6): 785-786. PMID 27707447
11. Paruthi S, Brooks LJ, **D'Ambrosio C**, Hall WA, Kotagal S, Lloyd RM, Malow BA, Maski K, Nichols C, Quan SF, Rosen CL, Troester MM, Wise MS. Pediatric Sleep Duration Consensus Statement: A Step Forward. *J Clin Sleep Med*. 2016 Dec 15;12(12): 1705-1706, PMID 27855732
12. Ozsancak AU, Jothianandan K, **D'Ambrosio C**, Sidhom S, Garpestad E, Hill, NS. Effects of Noninvasive Versus Invasive Mechanical Ventilation on Sleep in the Intensive Care Unit- A Pilot Study. *EMJ Respir*. 2020;8(1):127-136.
13. Balk EM, Adam GP, Cao W, Bhuma MR, Forbes S, Mehta S, Panagiotou O, **D'Ambrosio C**, and Trikalinos T. Long-term health outcomes in obstructive sleep apnea: A systematic review of comparative studies of breathing measures as surrogate outcomes. Rockville, MD: Agency for Health Care Research and Quality, 2022 Dec 3.
14. Balk EM, Adam GP, Cao W, Bhuma MR, **D'Ambrosio C**, and Trikalinos T. Long-term effects on clinical event, mental health, and related outcomes of CPAP for obstructive sleep apnea: a systematic review. *J Clin Sleep Med* 2024 Feb 1.

Other Peer-Reviewed Publications

1. Karne S, **D'Ambrosio C**, Einarrson O, O'Connor PG. Hypersensitivity pneumonitis induced by intranasal heroin use. *Am J Med*, 1999;107: 392-395.
2. Roux JF, **D'Ambrosio C**, Mohsenin V. Sleep-related breathing disorders and cardiovascular disease. *Am J Med*, 2000; 108:396-402.
3. Lunghar L and **D'Ambrosio C**. Noninvasive ventilation in geriatric patients with acute respiratory failure. *Clin Chest Med* 2007 Dec; 28(4):793-800.
4. Ozsancak A, **D'Ambrosio C**, Garpestad E, Schumaker G, and Hill NS. Sleep and mechanical ventilation. *Crit Care Clin*. 2008 Jul; 24(3):517-31.
5. Katz ES and **D'Ambrosio CM**. Pathophysiology of pediatric obstructive sleep apnea. *Proc Am Thorac* 2008 Feb 15; 5(2):253-62.
6. Katz E, Mitchell R and **D'Ambrosio C**. Obstructive sleep apnea in infants. *Am J Respir Crit Care Med* 2012; Apr 15; 185(8):805-16.
7. Sterschein R, Moll M, Ng J, **D'Ambrosio C**. Immune Checkpoint Inhibitor-related Pneumonitis. Incidence, Risk Factors, and Clinical and Radiographic Features. *Am J. Respir Crit Care Med*. 2018 Oct 1;198(7):951-953.
8. Katz ES and **D'Ambrosio C**. Safe Sleep after One Year of Age. *J. Clin Sleep Med*. 2021 Sept 21.

Non-peer reviewed scientific or medical publications/materials in print or other media

Reviews, Chapters, Monographs, and Editorials

1. **D'Ambrosio C**. Internal Medicine Section. Editor and Chapter Author. In: Donnelly J and Lipscher R, editors. *USMLE Step 3 Review: Integrated Clinical Sciences*. St. Louis, MO: Mosby, Inc., 1996. (record of p. nos. not retained)
2. **D'Ambrosio C**, Mohsenin V. Sleep in asthma. *Clin Chest Med* 1998 Mar; 19(1):127-37.
3. **D'Ambrosio C**. Miscellaneous Syndromes causing Hypersomnia. In: Lee-Chiong TL, Sateia MJ, Carskadon MA, editors. *Sleep Medicine*. Philadelphia: Hanley and Belfus: 2002. p.203-205.
4. **D'Ambrosio C**. Quality of Life of Shift Workers. In: **D'Ambrosio C**, editor. *Chronobiology and Shiftwork, Clinics in Occupational and Environmental Medicine* 2003 May; 3:2. P.333-338.
5. Tanios M and **D'Ambrosio C**. Obstructive Sleep Apnea: Why the gender bias? In: Legato M, editor. *Principles of Gender-Specific Medicine*. London and Burlington, MA: Elsevier Academic Press 2004. p. 355-259.
6. **D'Ambrosio C**, and Hill N, "A Low-Cost Way to Manage Obstructive Sleep Apnea: Does it Pay?" *Chronic Resp Dis* 2004; 1:8-1
7. Perrin C, Unterborn J, **D'Ambrosio C**, Hill N. Pulmonary Complications of Chronic Neuromuscular Diseases and their Management. *Muscle & Nerve* 2004; 29: 5-27.
8. Perrin C, **D'Ambrosio C**, White A, and Hill N. Sleep in Restrictive and Neuromuscular Respiratory Disorders. *Seminars in Respiratory and Critical Care Medicine* 2005; 26: 117-130.
9. Perrin C, **D'Ambrosio C**, White A, Garpestad E, and Hill N. Restrictive Thoracic and Neuromuscular Disorders. In: Lee-Chiong T, editor. *Sleep: A Comprehensive Handbook*. Hoboken, NJ: Wiley Press, 2006. p. 693-704.
10. **D'Ambrosio C**, O'Reilly S, Hill NS. Noninvasive Ventilation for Sleep-Disordered Breathing. Butkov N and Lee-Chong T, editors. *Fundamentals of Sleep Technology*. Philadelphia: Lippincott Williams & Wilkins 2007. p. 481-490.

11. Lam K and **D'Ambrosio C**. Restless Leg Syndrome and Periodic Limb Movement Disorder in Pregnancy. In: Rosene-Montella and Bourjeily, editors. Pulmonary Problems in Pregnancy: Clinical and Research Aspects. Totowa, NJ: Humana Press, 2007. (record of p. nos. not retained)
12. Garpestad E, **D'Ambrosio C**, Hill NS. Nocturnal noninvasive ventilation. Chest 2008 May;133(5):1275-86.
13. **D'Ambrosio C** and Katz E. Pediatric obstructive sleep apnea. Clin Chest Med 2010 Jun; 31(2):221-34.
14. Siddiqui F. and **D'Ambrosio C**. Sleep Disorders in Older Patients. In: Pisani M, editor. Aging and Lung Disease: A Clinical Guide. New York: Springer Science + Business Media. 2012. p. 173-188.
15. **D'Ambrosio C** and Redline S. Sleep Across the Lifespan. In: Redline S. and Berger NA, editors. Impact of Sleep and Sleep Disturbances on Obesity and Cancer. Energy Balance and Cancer series, vol. 8. New York: Springer Science+Business Media 2014. p. 1-23.
16. Khan WH, Mohsenin V, **D'Ambrosio C**. Sleep in Asthma. In: **D'Ambrosio C**, editor. Sleep-Disordered Breathing: Beyond Obstructive Sleep Apnea. Clin Chest Med 2014 Sep;35(3):483-93.
17. Grover A, Clark-Bilodeau C, **D'Ambrosio CM***. Restless leg syndrome in pregnancy. Obstet Med. 2015 Sep;8(3):121-5
18. Scurlock C, **D'Ambrosio C**. Telemedicine in the intensive care unit: state of the art. Crit Care Clin. 2015 Apr;31(2):187-95.
19. Criner GJ, Dreher M, **D'Ambrosio CM**, Zuwallack R, Geiseler J, Pepin JL. COPD Advanced Patient Management. Chest 2018 Jun;153(6):1497-1498.
20. Pisani MA, **D'Ambrosio C**. Sleep and Delirium in Adults Who Are Critically Ill: A Contemporary Review. CHEST 2019 Dec 23. PMID 31874132. Invited review.
21. Kumar S, Anton A, **D'Ambrosio C**. OSA in Women. Clinics in CHEST Medicine, submitted 2020
22. Katz E, **D'Ambrosio C**. Comfort the Kid! Infant-Parent Bonding and the Perils of Cry it Out. Ivory Tower Books. 2020
23. Katz ES and **D'Ambrosio C**. Safe sleep after one year of age. J Clin Sleep Med. 2021 Sept 21
24. **D'Ambrosio CM***. Hemoptysis. In Harrison's Principles and Practices of Internal Medicine 21st edition ed Loscalzo J. New York: McGraw-Hill, Health Professions Division, 2022.
25. Sodhi A, Pisani M, Glassberg M, Bourjeily G, **D'Ambrosio C***. Sex and Gender in Lung Disease and Sleep Disorders: A State of the Art Review. CHEST.2022 Sep;162(3):647-658. PMID: 35300976.
26. Tobias L, Pisani M, **D'Ambrosio C***. Sleep Disruption and it's Relationship to ICU Outcomes. In. Sleep and Critical Illness. Weinhouse G and Devlin JW. Switzerland: Springer 2022.
27. Sodhi A, Cox-Flaherty K, Greer MK, Lat Ti, Gao Y, Polineni D, Pisani MA, Bourjeily G, Glassberg MK, **D'Ambrosio C***. Sex and Gender in Lung Disease and Sleep Disorders: A State of the Art Review, Part 2. CHEST 2022 Sep 29:S0012-3692(22)03896-X online ahead of print. PMID: 36183784.
28. Tobias L, Pisani M, **D'Ambrosio C***. Sleep Disruption and its Relationship to ICU Outcomes. In. Sleep and Critical Illness. Weinhouse G and Devlin JW. Switzerland: Springer, 2022.
29. Sodhi A, Cox-Flaherty K, Greer MK, Lat TI, Gao Y, Polineni D, Pisani MA, Boujeily G, Glassberg MK, **D'Ambrosio C***. Sex and Gender in Lung Disease and Sleep Disorders: A State of the Art Review, Part 2. CHEST 2022 Sep 29:S0012-3692(22)03896-X. online ahead of print. PMID 36183784
30. **D'Ambrosio C*** and Walker A. touchReviews in Respiratory & Pulmonary Diseases. 2022;7(2): online ahead of journal publication.

31. Katz S and **D'Ambrosio C**. Catathrenia in children: clinical presentation, polysomnographic features, natural history, and response to therapy. J Clin Sleep Med. 2023 April 17. PMID: 37066744.

Thesis

D'Ambrosio C, Variations in Thermal and Valsalva Responses of the Human Finger Microcirculation. Master's Thesis The George Washington University Press, 1988