

Dean Hess Curriculum Vitae

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Education

1972	B.A. <i>cum laude</i>	Chemistry	Messiah College
1974	Diploma	Respiratory Therapy	Saint Joseph Hospital
1980	M.Ed.	Biology	Millersville, University
1994	Ph.D.	Health Service Management	LaSalle University

Faculty Academic Appointments

1975-1990	Program Director	School of Respiratory Therapy	York Hospital and York College of PA
1990-1992	Instructor	School of Respiratory Therapy	York College of PA
1992-1996	Instructor	Anesthesia	Harvard Medical School
1996-2004	Assistant Professor	Anesthesia	Harvard Medical School
2004-2016	Associate Professor	Anesthesia	Harvard Medical School
2016-2018	Teaching Associate	Anesthesia	Harvard Medical School
2015-present	Part-time Lecturer	College of Professional Studies Master of Science in Respiratory Care Leadership	Northeastern University

Major Administrative Leadership Positions**Local**

1990-1992	Assistant Director of Research	York Hospital
1992-2016	Assistant Director of Respiratory Care	Massachusetts General Hospital
2016-present	Per diem, Respiratory Care	Massachusetts General Hospital

Committee Service**Local**

1975-1992	Respiratory Therapy Program Advisory Committee	York College of PA
1977-1989	Allied Health Educator's Committee 1977-1979	York Hospital Chairman
1978-1984	Respiratory Therapy Advisory Committee	Harrisburg Area Community College
1980-1989	Health Record Administration Advisory Committee 1980-1989	York College of PA Allied Health Steering Committee
1981-1984	Allied Health Education Consortium of Dauphin, Lancaster, and York Counties 1981 1982-1983	Secretary Chairman
1992-1994	Critical Care Committee / Research Quality Improvement Subcommittee	Massachusetts General Hospital
1994-1995	Education Task Force; Patient Restructuring Committee	Massachusetts General Hospital
1994-1995	Intensive Care Unit Surveillance Group	Massachusetts General Hospital
1995-1997	Thoracic Operations Improvement Committee; Pathways Development Subcommittees 1995-1996 1996-1997	Massachusetts General Hospital Asthma, COPD and Pneumonia Chairman, Secretion Clearance Operations Improvement Committee
1996-1997	Health Professions Staff Committee	Massachusetts General Hospital

2000-2001	Patient Care Services Credentialing Committee	Massachusetts General Hospital
2000-2016	Code and Emergency Response Committee	Massachusetts General Hospital
2005-2007	Surgical CPM; Tracheostomy Care	Massachusetts General Hospital
2008-2016	Academic Appointments and Promotions Committee	Department of Anesthesia, Critical and Pain Medicine, Massachusetts General Hospital, Boston, MA

Regional

2005-2007	Respiratory Care Exploratory Committee	Bunker Hill Community College, Boston, MA
2008-2015	Respiratory Care Advisory Committee	Bunker Hill Community College

Professional Societies

1973-	<u>American Association for Respiratory Care (AARC)</u>	
1973-		Member
1987		Research Committee
1989-1990		Chair-elect, Adult Acute Care Section
1990		Consultant, Pulse Oximetry Study Group
1990-2015		Clinical Practice Guidelines Steering Committee (Chairman, 1991-2000)
1991-1992		Chair, Adult Acute Care Section
1993		Respiratory Care Research Council
1995		AARC representative to NAMDRC Consensus Conference on Home Nebulizer Therapy
1998-2001		AARC representative to ACCP Panel on Weaning from Mechanical Ventilation
2005-2017		Judge, Sputum Bowl Finals
1998-2020		Fellowship Selection Committee
1976-	<u>National Board for Respiratory Care (NBRC)</u>	
1976-		Member
1983-1987		Test item contributor
1987		Certified Pulmonary Function Test (CPFT) Examination Committee
1987		Judicial and Ethics Committee
1987-1988		Certified Respiratory Therapy Technician (CRTT) Examination Committee
1987-1992		Publications Committee
1987-1993		Member, Board of Trustees

1988-1989	Admissions Committee
1988-1989	Specialty Examination Committee
1988-2002	Clinical Simulation Examination Committee (Chairman, 1990 -1991)
1989-1991	Written Examination Committee
1989-1991	Rules and Bylaws Committee
1989-1991	Perinatal-Pediatrics Examination Committee
1889-1995	International Credentialing Committee (Chairman, 1989-1991)
1990-1991	Chairman, Examination Committee (Chairman, 1991)
1990-1995	Executive Committee
1991	Secretary
1991-1993	Long-Range Planning Committee (Chairman, 1992-1993)
1992-1993	President
1994	Ad Hoc Committee to Consider Combined Registry Examination
1994	Ad Hoc Committee to Establish Cut Score for Written Registry Examination
1994-1995	Past President
1994-1995	Chairman, Nominations Committee
1989-	<u>American Thoracic Society (ATS)</u>
1989-	Member
1995	ATS Guidelines Committee on “Sleep Apnea: Recognition and Diagnostic Approaches
1995	ATS Consensus Conference on Recognition of Sleep Apnea, Washington, DC
1995	ATS Statement. Standards for the diagnosis and care of patients with chronic obstructive pulmonary disease.
1995	Consensus Conference on Recognition of Sleep Apnea
1998-2002	Critical Care Assembly, Editor of Respiratory Care Section of the Journal Club on the Internet
1999-2002	Critical Care Program Committee
2000-2002	Writing Group, position paper on the use of inhaled nitric oxide
2007-2008; 2015-2018	Membership Committee
2012-2016	Noninvasive Ventilation Clinical Practice Guidelines Writing Committee
2013-2016	Mechanical Ventilation for ARDS Clinical Practice Guidelines Writing Committee

	2017-present	Long-term noninvasive ventilation in chronic hypercapnic COPD
<u>1992-</u>	<u>Society of Critical Care Medicine (SCCM)</u>	
	1992-present	Member
	1994	Workshop on ICU Personnel Cost Reduction, Coalition for Critical Care Excellence
	2003-present	Respiratory Care Section
	2010-present	Fellow Critical Care Medicine (FCCM)
	2012	Sepsis and Mechanical Ventilation Planning Committee
	2014-2015	ICU Liberation Planning Committee
	2015-2017	ACCM Nominating Committee for the Board of Regents.
1996-2016	<u>American College of Chest Physicians (ACCP)</u>	
	1996-2016	Member
	1997	Fellow College of Chest Physicians (FCCP)
	2001-2004	Health Science and Policy Committee
	2003	Ethics Committee
	2003	Abstract Review Committee
	2004-2006	Allied Health Network Steering Committee
2000-	<u>International Society for Aerosols in Medicine (ISAM)</u>	
	2000-	Member
2002-2016	<u>Massachusetts Thoracic Society (MTS)</u>	
	2002-2012	Member
	2007-2010	Chadwick Medal Award Committee
2007-2012	<u>Foundation for the Advancement of CardioThoracic Surgical Care (FACTS-Care)</u>	
	2006-2012	Board of Medical Advisors
	2007-2012	Member
	2010-2011	Program Committee
2014-2018	<u>American Board of Internal Medicine (ABIM)</u>	Member, Pulmonary Disease Board

Editorial Activities

Ad hoc Reviewer for the following journals:

American Journal of Respiratory and Critical Care Medicine
 Anesthesiology
 Anesthesia and Analgesia
 Annals of the American Thoracic Society
 Annals of Intensive Care
 Chest
 Canadian Medical Association Journal
 Cochrane Collaboration
 Critical Care
 Critical Care Medicine
 European Respiratory Journal
 Intensive Care Medicine
 Journal of Aerosol Medicine and Pulmonary Drug Delivery
 Journal of Applied Physiology
 Journal of Chronic Obstructive Pulmonary Disease.
 Journal of Clinical Anesthesia
 Journal of Critical Care
 Journal of Clinical Monitoring
 Journal of Intensive Care
 PLOS One
 Lancet
 Lancet Respiratory Medicine
 Lancet Digital Health
 New England Journal of Medicine
 Respirology
 Respiratory Care
 Respiration
 Simulation in Healthcare
 Thorax

Other Editorial Roles

1985	Consulting Editor	RESPIRATORY CARE
1986	Guest Editor	RESPIRATORY CARE, York Hospital special issue (September)
1986-1998	Editorial Board (Chairman 1993-1994)	RESPIRATORY CARE
1990	Guest Editor	RESPIRATORY CARE; Noninvasive monitoring in respiratory care (June, July)
1990	Guest Editor	Malley, Clinical Blood Gasses, WB Saunders 1992 (Editorial Board)

1992	Guest Editor	Miller-Keane Encyclopedia & Dictionary of Medicine, Nursing, and Allied Health. WB Saunders, 1992 (Editorial Board)
1993	Guest Editor	RESPIRATORYCARE; Oxygenation in the critically ill patient (June and July)
1994	Guest Editor	Witek TJ, Schachter EN. Pharmacology and therapeutics in respiratory care. WB Saunders, 1994 (Consulting Editor)
1996	Guest Editor	RESPIRATORYCARE; Mechanical ventilation: ventilatory techniques, pharmacology, and patient management strategies (April and May)
1997	Guest Editor	RESPIRATORYCARE; Emerging health care delivery and respiratory care (January)
1997	Guest Editor	RESPIRATORYCARE; Noninvasive positive pressure ventilation (April)
1997	Guest Editor	Hess D, Hurford WE. Inhaled nitric oxide. Part 1 and Part 2. Respiratory Care Clinics of North America (September)
1998-2007	Associate Editor	RESPIRATORYCARE
1999	Guest Editor	Hess D, Hurford WE. RESPIRATORYCARE; Inhaled nitric oxide (February, March)
1999	Guest Editor	Bigatello LM, Hess DR. International Anesthesiology Clinics, Update on respiratory Critical Care (Summer)
2000-2012	Editorial Board	International Anesthesiology Clinics
2000-2012	Editorial Board	Critical Care Alert
2001	Guest Editor	Hess DR, MacIntyre NR. RESPIRATORY CARE; Tracheal gas insufflation (February)
2001	Guest Editor	Mishoe SC, Hess DR. RESPIRATORYCARE; Evidence-based medicine in respiratory care (November, December)
2002-2007	Contributing Editor	Practical Reviews in Critical Care

2003-2009	Editorial Board	Ibero American Journal of Noninvasive Ventilation
2003-present	Editorial Board	Journal of Aerosol Medicine and Pulmonary Drug Delivery
2004	Guest Editor	Hess DR. RESPIRATORY CARE; New Horizons: Evidence-based respiratory care
2005	Guest Editor	Hess DR, Bigatello LM. RESPIRATORY CARE; Applied Respiratory Physiology: Use of Ventilator Waveforms and Mechanics in Management of Critically Ill Patients (January, February)
2006	Guest Editor	Benditt JO, Hess DR. RESPIRATORY CARE; Neuromuscular Disease in Respiratory and Critical Care Medicine (August, September)
2007	Guest Editor	Rubin BK, Hess DR. RESPIRATORY CARE; Airway Clearance: Physiology, Pharmacology, Techniques, and Practice (September, October)
2008-2017	Editor-in-Chief	RESPIRATORY CARE
2017-present	Managing Editor	RESPIRATORY CARE
2008-2017	Editorial Board	Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare

Honors and Prizes

1974	Harold W. Metzler Memorial Award	Saint Joseph Hospital
1985	Literary Award	American Respiratory Care Foundation
1986	Literary Award	American Respiratory Care Foundation
1988	Literary Award	American Respiratory Care Foundation
1991	Best Original Paper	American Respiratory Care Foundation
1993	Literary Award	American Respiratory Care Foundation
1996	Teacher of the Year	MGH Pulmonary and Critical Care Fellows

1997	Honorary Member	Lambda Beta Society	
1998	Partners in Excellence Award	Partners HealthCare	Operations Improvement for Asthma and COPD
1998	Teacher of the Year	MGH Pulmonary and Critical Care Fellows	
1999	Forrest M. Bird Award	American Respiratory Care Foundation	Lifetime Scientific Achievement
1999	Life Membership	American Association for Respiratory Care	Lifetime Scientific Achievement
1999	Stanley M. Wyman, MD, Teaching Award	MGH Medical House Staff	Teaching of medical residents in MGH MICU
2000	Partners in Excellence Award	Neonatal Nitric Oxide Transport Team	Co-team leader
2001	Simon Rodbard Memorial Honor Lecture	American College of Chest Physicians	Recognition of contributions to the field of mechanical ventilation
2001	Teacher of the Year	Harvard Combined Pulmonary and Critical Care Medicine Program	Teaching of Pulmonary Critical Care fellows
2006	Jimmy A. Young Medal	American Association for Respiratory Care	Meritorious service to the AARC
2007	Robert H. Miller Award	National Board for Respiratory Care	Service to the profession.
2007	Partners in Excellence Award	Partners HealthCare	Code and Emergency Response Team
2008	Partners in Excellence Award	Partners HealthCare	Tracheostomy Care Team
2009	Shubin-Weil Master Clinician/Teacher: Excellence in Bedside Teaching Award	Society for Critical Care Medicine	Bedside teaching of critical care trainees
2009	Partners in Excellence Award	Partners HealthCare System, Inc.	Development of Rapid Response Team

2011	Chadwick Medal	American Lung Association of New England Medical and Scientific Branch (formerly Massachusetts Thoracic Society)	Meritorious contributions in the study of tuberculosis and other thoracic diseases
2012	Presidential Citation	Society of Critical Care Medicine	Outstanding contributions to the society in 2012
2014	Hector Leon Garza MD Achievement Award	American Respiratory Care Foundation	Excellence in international respiratory care
2016	Lifetime Achievement Award	Massachusetts Society for Respiratory Care	Contributions to the field of respiratory care
2018	Presidential Citation	Society of Critical Care Medicine	Outstanding contributions
2018	Legend in Respiratory Care	American Association for Respiratory Care	Outstanding contributions

Report of Funded and Unfunded Projects

Funding Information

Past

1992	Injury patterns of seat belted patients admitted to a trauma center AAA Foundation for Traffic Safety PI: Dean Hess In this project, we probed the Trauma Registry and identified injury patterns of persons wearing seat belts who were involved in motor vehicle accidents. The AAA Foundation published the report.
1993	An evaluation of the delivery of steroids by MDI using a catheter nozzle extension: The effects of catheter length and number of puffs Monaghan/Trudell Fellowship for Aerosol Technique Development PI: Dean Hess We evaluated the use of a catheter inserted through the endotracheal tube to better deliver inhaled aerosols to intubated patients; published in Intensive Care Medicine.
1993-1994	Clinical evaluation of the validity of a mathematical model of respiratory dynamics during mechanical ventilation Puritan-Bennett PI: Dean Hess In this observational study, we collected respiratory data from mechanically ventilated patients and tested how well those results fitted previously published mathematical models of respiratory mechanics. The results were presented in abstract at the American Association for Respiratory Care.
1994-1998	Massachusetts General Hospital. Ohmeda NO protocols INO-05 and INO-06. (Site PI: William Hurford MD)

Funded by Ohmeda and INO Therapeutics.

Co-investigator

These were multi-center industry-sponsored studies to evaluate the effect of inhaled nitric oxide in patients with ARDS.

- 1996-1998 An evaluation of the feasibility of weekly rather than daily changes of in-line suction catheters
Department Funds
PI: Dean Hess
In this study, we evaluated the rate of ventilator-associated pneumonia with weekly inline suction catheter changes. Results were published in abstract form and led to a change in clinical practice at the Massachusetts General Hospital. This practice change was eventually adopted at many hospitals around the world.
- 1996-1999 Trial of liquid ventilation with perflubron in patients with ARDS.
(Site PIs: Robert Kacmarek PhD RRT and B. Taylor Thompson MD)
Alliance
Co-investigator
This was a multi-center industry-funded project to evaluate the effect of partial liquid ventilation in patients with ARDS.
- 1997-2008 The contribution of chest wall compliance to the shape of the total respiratory system pressure-volume curve in the acute respiratory distress syndrome (ARDS).
(PI: R. Scott Harris, MD)
Department Funds
Co-investigator
In this study, we inserted esophageal balloons to partition the respiratory mechanics of the lungs and the chest wall. The full paper was published in Critical Care Medicine.
- 1998-2000 Massachusetts General Hospital. Noninvasive ventilation using proportional assist ventilation
Respironics.
Site PI: Dean Hess
This was a multi-center industry-funded project to evaluate the use of proportional assist ventilation in patients receiving noninvasive ventilation. The full paper was published in the American Journal of Respiratory and Critical Care Medicine.
- 1998-2000 Validation of the diffusing capacity for inhaled nitric oxide as a measurement of lung function in human subjects undergoing general anesthesia.
(PI: William E. Hurford MD)
Department Funds
Co-investigator
This study was designed to evaluate whether diffusing capacity can be measured in critically ill mechanically ventilated patients receiving inhaled nitric oxide therapy.
- 1998-2000 Nitric Oxide uptake during inhaled Nitric Oxide therapy
Department Funds
PI: Dean Hess

In this project, we attempted to determine NO uptake in patients receiving inhaled nitric oxide therapy. It was our hope that this would allow us to better identify patients who have a clinical response to this therapy.

- 1998-2002 Inhaled nitric oxide for the treatment of sickle cell crisis. PI: C. Alvin Head MD
Funded by INO Therapeutics
Technical Coordinator
This was an investigator-initiated multi-center placebo-controlled study to evaluate the role of inhaled nitric oxide during sickle cell crisis.
- 1999-2000 The effect of altering inspiratory flow rise time and cycling criteria on comfort, respiratory drive and work of breathing in pressure support ventilation.
(PI: Robert M. Kacmarek PhD RRT)
Department Funds
Co-investigator,
In this observational clinical study, we studied the effects of changing the shape of the pressure waveform during pressure support ventilation. The results were published in Respiratory Care.
- 1999-2001 Prone positioning for lung recruitment in ARDS
(PI: Robert M. Kacmarek PhD RRT)
Department Funds
Co-investigator
This was an observational study using computed tomography to assess the effect of prone position on lung recruitment in mechanically ventilated patients. The results were presented as an abstract at the American Thoracic Society.
- 1999-2004 Effect of altering pressure and flow on pharyngeal muscle function.
(PI: David White MD)
NIH NCRR GCRC MO1 RR02635, 1 P50 HL60292, RO1 HL48531, and T32 HL07633.
Co-investigator
The purpose of this study was to determine the stimuli modulating genioglossus activity, dissociating the influences of pharyngeal negative pressure, from inspiratory airflow, resistance, and CO₂. The paper was published in the American Journal of Respiratory and Critical Care Medicine.
- 1999-2006 The effect of lung recruitment maneuvers on oxygenation in patients with the acute respiratory distress syndrome.
(PI: Luca Bigatello MD)
Foundation for Anesthesia Education and Research
Co-investigator
This study was designed to assess the effect of lung recruitment maneuvers in mechanically ventilated patients with ARDS.
- 2000-2009 Open-label observational study of inhaled nitric oxide.
(PI: William E. Hurford MD)
Department Funds
Co-PI

This was a Phase IV study conducted at the Massachusetts General Hospital after inhaled nitric oxide was FDA-cleared for market. The results were presented in abstract form at several national meetings.

- 2001-2002 Objective assessment of Passy-Muir valves.
Department Funds
PI: Dean R. Hess
In this study, we measured tracheal pressure during placement of a speaking valve onto a tracheostomy tube to determine when a speaking valve could be used safely
- 2001-2002 An objective analysis of the pressure-volume curve in the acute respiratory distress syndrome. (PI: Jose Venegas PhD)
Department Funds
Co-investigator
At the time of this study, there was much enthusiasm for the use of pressure-volume curves to set the ventilator, and this study was designed to better elucidate this approach. The results were published in the American Journal of Respiratory and Critical Care Medicine.
- 2001-2012 Pulmonary function after off-pump and on-pump coronary artery bypass surgery in moderate to severe obstructive pulmonary disease.
PI: Marcos Vidal Melo MD PhD
Department Funds
Co-investigator
This was an evaluation of intraoperative tidal alveolar recruitment/derecruitment, exhaled nitric oxide, and lung dysfunction in patients with and without COPD undergoing coronary artery bypass grafting.
- 2002 Performance of small volume nebulizers.
Funded by Cardinal Healthcare/Allegiance.
PI: Dean R. Hess
This was an in vitro study that evaluated output and particle size from a variety of jet nebulizers.
- 2002 Performance of small volume nebulizers in upright and tilted positions
Funded by Cardinal Healthcare/Allegiance.
PI: Dean R. Hess
In practice, patients often tilt the nebulizer to the side when breathing aerosol from the device. In this study, we compared the output of the device in several configurations and among commercially available devices.
- 2002-2003 Ventilatory patterns during prolonged mechanical ventilation: A pilot study.
(PI: Luca Bigatello MD)
The Jenney Foundation.
Co-investigator
In this study, we assessed respiratory variability in patients receiving long-term mechanical ventilation.

- 2002-2003 Noninvasive ventilation by a helmet and by a mask in volunteers with normal and increased ventilatory load
(PI: Luca Bigatello MD)
Sea-Long Medical Systems
Co-investigator
In this study, we investigated patient-ventilator interactions and rebreathing when using a helmet rather than a facemask as the interface.
- 2002-2003 Systematic recording of two known methods to measure the maximum inspiratory pressure developed by patients during mechanical ventilation: A quality assurance study
Department Funds
PI: Dean Hess
Several methods can be used to evaluate respiratory muscle strength by maximum inspiratory pressure with mechanically ventilated patients. In this study, we compared several of these approaches.
- 2002-2006 Outcome of patients undergoing prolonged mechanical ventilation for acute respiratory failure. (PI: Luca Bigatello MD)
The Jenney Foundation
Co-investigator
This was a retrospective analysis of the outcomes of patients admitted to the respiratory acute care unit and the Massachusetts General Hospital.
- 2003 Laboratory evaluation of biflex and cflex
Funded by Respironics.
PI: Dean Hess
This was an in vitro evaluation of the performance of biflex and cflex on devices designed for the treatment of sleep apnea.
- 2004-2006 Assessment of induced sputum as a tool to evaluate anti-inflammatory agents in patients with cystic fibrosis (PI: Henry Dorkin MD)
Cystic Fibrosis Foundation.
Co-investigator
In this study, we performed induced sputum as part of a multi-center study of the CF Foundation to determine whether sputum could be used to evaluate anti-inflammatory agents.
- 2005-2006 The effects of nitric oxide for inhalation on survival or the need for dialysis or a right ventricular assistance device (RVAD) in right ventricular infarction patients.
(PI: Kenneth Bloch MD)
Funded by INO Therapeutics
Technical Coordinator
This was a multi-center study to evaluate the benefit of inhaled nitric oxide in patients with right ventricular infarction.
- 2005-2006 A double-blind placebo-controlled trial of nebulized amikacin in mechanically ventilated patients with nosocomial pneumonia due to gram negative organisms (Site PI: Luca Bigatello MD)

Funded by Novartis.

Co-investigator

This was a multi-center study to evaluate the use of inhaled amikacin in patients with gram negative ventilator-associated pneumonia.

- 2005-2008 Identification for risk factors for occlusion of the tracheostomy tube by the posterior tracheal wall (PI: Ulrich Schmidt MD)
Departmental funds
Co-investigator
This retrospective study evaluated the incidence of tracheostomy tube apposition and factors affecting this clinical problem.
- 2006-2010 Readmission rates after discharge from RACU (PI: Ulrich Schmidt MD)
Departmental Funds
Co-investigator
This study assessed the effect of an intervention of verbal report in addition to written report on the readmission of patients to the RACU at the Massachusetts General Hospital.
- 2007 Utilization of noninvasive ventilation and Heliox in academic emergency departments.(PI: Carlos Camargo MD)
Funded by Respironics.
Co-PI
This survey of academic emergency departments in the United States assessed the use of noninvasive and heliox, and factors affecting this utilization.
- 2007 Multicenter implementation of a consensus-developed, evidence-based, spontaneous breathing trial protocol (Site PI: Aaron Waxman MD)
Funded by Partnership for Excellence in Critical Care.
Co-investigator
This multi-center study evaluated the widespread implementation of a protocol for spontaneous breathing trials and barriers to implementation of the protocol.
- 2007-2009 Evaluation of the impact of multi-disciplinary guidelines and a dedicated respiratory therapist on the care of patients with a tracheostomy
Department Funds
PI: Dean Hess
This retrospective study assessed the impact of standardized guidelines and a dedicated respiratory therapist on care of patients with tracheostomy.
- 2008 The effects of nitric oxide for inhalation on myocardial infarction size (PI: Kenneth Bloch MD)
Funded by INO Therapeutics
Technical Coordinator
This was a multi-center study to evaluate the effect of inhaled nitric oxide on infarct size in patients with acute MI.
- 2008-2012 Trend of ventilation in the operating room (PI: Ulrich Schmidt MD PhD)
Department Funds.

Co-investigator

This study evaluated the trends in mechanical ventilation strategies in the operating rooms at the MGH following increasing recognition of the benefits of lung protective ventilation strategies.

- 2009-2011 The effect of tracheostomy downsizing on patient outcome. (PI: Ulrich Schmidt MD PhD)
Department Funds.
Co-investigator
In this study, we evaluated the effect of early downsizing of tracheostomy tube size on the use of speaking valves and oral intake.
- 2010-2012 Development of an interactive, clinical algorithm-driven interoperable smart ventilator (PI: Jussi Saukkonen MD)
Funded by CIMIT
Co-investigator
The aim of this study was to develop a clinical algorithm to interface with a critical care ventilator to inform evidence-based mechanical ventilation strategies.
- 2010-2012 Design of a low-cost ventilator for use in third world countries. (PI: Jussi Saukkonen MD)
Funded by CIMIT and Gates Foundation
Co-investigator
The aim of this study was to design a ventilator that can be used effectively for positive pressure ventilation at low cost.
- 2011-2012 Aerosol furosemide for dyspnea relief: laboratory and clinical studies. (PI Robert Banzett PhD)
NR12009
Consultant
This study evaluated the use of inhaled furosemide to treat dyspnea. I assisted with the design of the delivery system.
- 2012-2016 EPVent 2 - A Phase II study of Mechanical Ventilation Directed by Transpulmonary Pressures.
(PI: Daniel Talmor MD and Stephen Loring MD)
Co-investigator for MGH
This is a multi-center study comparing the use of transpulmonary pressure to the use of the ARDSnet oxygenation tables to titrate PEEP in patients with ARDS
- 2011-2016 A study of the influence of sGC genotype on response to inhaled nitric oxide in healthy volunteers. (PI: Christopher Newton-Cheh MD)
NIH: 1R01HL113933-01A1; August 5, 2013 – June 30, 2017); 5% effort
Co-investigator
The primary aim of this study is to determine if the change in plasma level of cGMP at 30 minutes after administration of inhaled NO differs in subjects according to *GUCY* genotype.

- 2011-2016 Cytoprotection by carbon monoxide in sepsis and ALI/ARDS: Novel opportunities for therapy. Overall PI Augustine M Choi MD; Mark Parrella MD; Core PI: Laura Fredenburgh MD
NIH 5P01HL108801-03
Core D co-investigator: CO delivery in sepsis and acute lung injury
Funded until June 30, 2016; 10% effort
Phase 1 clinical trial conducted at the Massachusetts General Hospital, Brigham and Women's Hospital, Duke University Medical Center, and Cornell University.
- 2019-present Implementation of Interprofessional Training To Improve Uptake Of Noninvasive Ventilation In Patients Hospitalized With Severe Copd Exacerbation; PI Mihaela S Stefan, MD PhD. Baystate Medical Center.
NIH 1R01HL146615-01
Consultant
- 2019-present Educational strategies to promote post-extubation non-invasive ventilation in patients with acute respiratory failure; PI Timothy D. Girard, MD. University of Pittsburgh.
NIH 1U01HL143507-01
Consultant

Report of Local Teaching and Training

Teaching of Students in Courses

- 1998-1999 Ventilator-induced lung injury
Harvard Pulmonary Medicine Postgraduate Course
Boston, MA
- 1998 Harvard Emergency Medicine Course, Harvard Medical School
Boston, MA
- 1998 Noninvasive positive pressure ventilation Harvard Emergency Medical Course
Harvard Medical School,
Boston, MA
- 2005-2006 Mechanical Ventilation Harvard Medical School
HST Respiratory Physiology Boston, MA
HST students

Formal Teaching of Residents, Clinical Fellows and Research Fellows

Local

- 2000-2014 Mechanical ventilation Department of Medicine
Internal medicine resident, emergency Massachusetts General Hospital
medicine residents, medical student
- 2000-2002 Noninvasive positive pressure ventilation, Brigham and Women's Hospital,
Core Critical Care Lecture Series Boston, MA
Anesthesia residents, critical care fellows

2001-2016	Mechanical ventilation Pulmonary Core Lectures, Anesthesia residents	Anesthesia and Critical Care Medicine, Massachusetts General Hospital
2003	Monitoring lung mechanics during mechanical ventilation Weaning from mechanical ventilation Critical Care Fellows	Anesthesia and Critical Care Medicine Massachusetts General Hospital
2003-2010	Mechanical Ventilation Core Lecture Series Stroke/ICU Fellows	Department of Neurology, Massachusetts General Hospital Boston, MA
2005	Monitoring waveforms and mechanics during mechanical ventilation Pediatric Critical Care Fellows	Massachusetts General Hospital Boston, MA
2005-2007	Advances in mechanical ventilation – what’s worth keeping? Pediatric Critical Care Fellows	Massachusetts General Hospital Boston, MA
2005-2019	Pulmonary Fellows Lecture Series Anatomy of the ventilator Noninvasive positive pressure ventilation Tracheostomy tubes Advanced ventilator modes Using the ventilator to assess lung mechanics Pulmonary Critical Care Fellows	Massachusetts General Hospital Boston, MA
2006	Noninvasive ventilation Anesthesia and Critical Care Residents	Massachusetts General Hospital Boston, MA
2007	New ventilation modes Anesthesia and Critical Care Residents	Massachusetts General Hospital Boston, MA
2010-2016	Mechanical ventilation teaching rounds Pulmonary critical care fellows	Massachusetts General Hospital Boston, MA
2011	Noninvasive ventilation Internal Medicine Residents	Massachusetts General Hospital Boston, MA
2012	Oxygen Therapy and Noninvasive ventilation Internal Medicine Residents	Massachusetts General Hospital Boston, MA
2013-2015	Pulmonary Fellows Lecture Series	Brigham and Womens Hospital

	Anatomy of the ventilator Using the ventilator to assess lung mechanics Advanced ventilator modes Pulmonary Critical Care Fellows	Boston, MA
2014-2015	Oxygen Therapy and Noninvasive ventilation Internal Medicine Residents	Massachusetts General Hospital Boston, MA

Formal Teaching of Peers (e.g., CME and other continuing education courses)

1998	Assessment of acid-base status	Respiratory Care Department Massachusetts General Hospital Boston, MA
1999	Aerosol delivery during mechanical ventilation	Respiratory Care Department Massachusetts General Hospital Boston, MA
1999	Basic lung mechanics, Assessment of ventilation	Respiratory Care Department Massachusetts General Hospital Boston, MA
1999	Update on aerosol delivery	Respiratory Care Department Massachusetts General Hospital Boston, MA
2000	Inhaled Nitric Oxide Update	Respiratory Care Department Massachusetts General Hospital Boston, MA
2001	Diseases requiring mechanical ventilation	Nursing care of the respiratory compromised patient Massachusetts General Hospital Boston, MA
2001	New drugs for inhalation - Bronchodilators, steroids and leukotriene antagonists	Respiratory Care Department Massachusetts General Hospital Boston, MA
2001	New drugs for inhalation - Antibiotics and mucolytics	Respiratory Care Department Massachusetts General Hospital Boston, MA
2002	Diseases requiring mechanical ventilation Blood gas interpretation	Nursing care of the respiratory compromised patient Massachusetts General Hospital. Boston, MA

2002	Patient-ventilator synchrony	Respiratory Care Department Massachusetts General Hospital Boston, MA
2002	Chest X-ray interpretation	Respiratory Care Department Massachusetts General Hospital Boston, MA
2002	Use of the NICO monitor	Respiratory Care Department Massachusetts General Hospital Boston, MA
2004	The evidence for techniques to discontinue mechanical ventilation	Respiratory Care Department Massachusetts General Hospital Boston, MA
2005	Prevention of ventilator-associated pneumonia: Role of the respiratory therapist	Respiratory Care Department Massachusetts General Hospital Boston, MA
2005-2010	Core Lecture Series; Mechanical ventilation strategies	Respiratory Acute Care Unit Massachusetts General Hospital Boston, MA
2008	Should we use an esophageal balloon to set PEEP?	Respiratory Care Department Massachusetts General Hospital Boston, MA
2009	Should saline instillation be part of VAP prevention?	Respiratory Care Department Massachusetts General Hospital Boston, MA
2010	Meta-analysis: Higher versus lower PEEP for ALI/ARDS	Respiratory Care Department Massachusetts General Hospital Boston, MA
2011	Noninvasive ventilation update	Respiratory Care Department Massachusetts General Hospital Boston, MA
2011	Respiratory care of the patient with neuromuscular disease	Respiratory Care Department Massachusetts General Hospital Boston, MA
2012	High-flow oxygen therapy	Respiratory Care Department Massachusetts General Hospital Boston, MA

2012	Ventilator-associated events	Respiratory Care Department Massachusetts General Hospital Boston, MA
2014	Esophageal manometry	Respiratory Care Department Massachusetts General Hospital Boston, MA
2014	Esophageal manometry	Anesthesia and Critical Care Staff/Residents/Fellows Massachusetts General Hospital Boston, MA
2013-2014	Anatomy of the ventilator	Neurology Critical Care Fellows Massachusetts General Hospital Boston, MA
2015	Mechanical ventilation of the patient with obstructive lung disease	Respiratory Care Department Massachusetts General Hospital Boston, MA
2015	Heart-lung interactions	Respiratory Care Department Massachusetts General Hospital Boston, MA
2016	Respiratory Physiology: Ventilation	Respiratory Care Department Massachusetts General Hospital Boston, MA
2016	Respiratory Physiology: Diffusion	Respiratory Care Department Massachusetts General Hospital Boston, MA
2016	Respiratory Physiology: Blood Flow	Respiratory Care Department Massachusetts General Hospital Boston, MA
2017	Respiratory Physiology: Ventilation:Perfusion Relationships	Respiratory Care Department Massachusetts General Hospital Boston, MA
2017	Respiratory Physiology: Gas Transport	Respiratory Care Department Massachusetts General Hospital Boston, MA
2017	Respiratory Physiology: Respiratory Mechanics	Respiratory Care Department Massachusetts General Hospital

		Boston, MA
2017	Respiratory Physiology: Control of Breathing	Respiratory Care Department Massachusetts General Hospital Boston, MA
2018	Respiratory Physiology: Blood Flow	Respiratory Care Department Massachusetts General Hospital Boston, MA
2018	Respiratory Physiology: Ventilation:Perfusion Relationships	Respiratory Care Department Massachusetts General Hospital Boston, MA
2018	Respiratory Physiology: Gas Transport	Respiratory Care Department Massachusetts General Hospital Boston, MA
2018	Respiratory Physiology: Respiratory Mechanics	Respiratory Care Department Massachusetts General Hospital Boston, MA
2018	Respiratory Physiology: Control of Breathing	Respiratory Care Department Massachusetts General Hospital Boston, MA
2019	Inhaled Drugs, Part 1	Respiratory Care Department Massachusetts General Hospital Boston, MA
2019	Inhaled Drugs, Part 2	Respiratory Care Department Massachusetts General Hospital Boston, MA
2019	Inhaled Drugs, Part 3	Respiratory Care Department Massachusetts General Hospital Boston, MA
2019	Inhaled Drugs, Wrap-Up	Respiratory Care Department Massachusetts General Hospital Boston, MA
2020	Mechanical Ventilation of the Patient with COPD	Respiratory Care Department Massachusetts General Hospital Boston, MA
2020	High Flow Nasal Cannula	Respiratory Care Department Massachusetts General Hospital Boston, MA

2021	Arterial Blood Gas Surrogates	Respiratory Care Department Massachusetts General Hospital Boston, MA
2021	Evaluation of Respiratory Mechanics and Waveforms during Mechanical Ventilation	Respiratory Care Department Massachusetts General Hospital Boston, MA

Local Invited Presentations

1994	Delivery of aerosolized bronchodilators during mechanical ventilation / First Edward Farrell Memorial Lecture Children's Hospital, Boston, MA
1996	Waveforms and mechanics during mechanical ventilation / Lecture Options for humidification and drug delivery / Lecture Harvard Medical School, Cambridge, MA Management Issues in Respiratory and Critical Care
1997	Noninvasive positive pressure ventilation / Pulmonary Grand Rounds Massachusetts General Hospital, Boston, MA
1997	Mechanical ventilation of the asthmatic patient / Lecture Options for humidification and drug delivery / Lecture Harvard Medical School, Cambridge, MA Management Issues in Respiratory and Critical Care
1998	Waveforms and mechanics during mechanical ventilation / Lecture Mechanical ventilation of the patient with asthma / Lecture Techniques to deliver inhaled nitric oxide / Lecture Harvard Medical School, Cambridge, MA Management Issues in Respiratory and Critical Care
1999	Graphics and mechanics during mechanical ventilation / Lecture Open lung approach – pro / Debate Basic lung mechanics / Lecture Nitric oxide delivery systems / Lecture Harvard Medical School, Cambridge, MA Management Issues in Respiratory and Critical Care
2000	Basic mechanical ventilation for the primary care provider / Workshop Lung protective strategies are protective - pro / Debate Inhaled nitric oxide / Lecture Noninvasive positive pressure ventilation / Lecture Harvard Medical School, Cambridge, MA Management Issues in Respiratory and Critical Care

- 2000 New strategies for mechanical ventilation of the patient with acute respiratory failure /
Lecture
Harvard Pulmonary Medicine Postgraduate Course
Boston, MA
- 2000 Heliox and noninvasive ventilation / Lecture
Pulmonary and Critical Care Medicine Research Conference, Massachusetts General
Hospital, Boston, MA.
- 2000 Noninvasive positive pressure ventilation / Emergency Medicine Resident Lecture
Emergency Medicine Department, Massachusetts General Hospital, Boston, MA.
- 2000 Blood gases and acid-base balance / Lecture
Spaulding Rehabilitation Hospital, Boston, MA
- 2000 Noninvasive positive pressure ventilation / Lecture
Spaulding Rehabilitation Hospital, Boston, MA
- 2001 Mechanical ventilation / Lecture
ARDS management / Lecture
Advances in Mechanical Ventilation – What’s Worth Keeping? / Lecture
Harvard Medical School, Cambridge, MA
Management Issues in Respiratory and Critical Care
- 2001 Nursing care of the respiratory compromised patient with a focus on the mechanical
ventilated and tracheostomized patient: Diseases requiring mechanical ventilation / Lecture
Massachusetts General Hospital, Boston, MA
- 2001-2007 Advances in mechanical ventilation – What’s worth keeping? / Lecture
Harvard Pulmonary Medicine Postgraduate Course
Boston, MA
- 2001-2011 Mechanical ventilation / Lecture
Pulmonary and Critical Care Medicine, Massachusetts General Hospital, Boston, MA
- 2002 Advances in Mechanical Ventilation – What’s Worth Keeping / Lecture
Interactive Case Presentation / Lecture
Harvard Medical School, Cambridge, MA
Management Issues in Respiratory and Critical Care
- 2002 New modes of mechanical ventilation / Lecture
Anesthesia and Critical Care Grand Rounds
Massachusetts General Hospital, Boston, MA
- 2002 Nursing care of the respiratory compromised patient: Diseases requiring mechanical
ventilation; Blood gas interpretation / Lecture
Massachusetts General Hospital, Boston, MA

- 2003 Monitoring lung mechanics in the mechanically ventilated patient / Grand Rounds
Anesthesia and Critical Care Medicine
Massachusetts General Hospital, Boston, MA
- 2003 Inhalers and inhalation aids / Lecture
Partners Asthma Center, Boston, MA.
- 2005 Ventilator-associated pneumonia / Lecture
Prone positioning for ARDS / Lecture
Anesthesia and Critical Care,
Massachusetts General Hospital, Boston, MA.
- 2005 Noninvasive positive pressure ventilation / Lecture
Partners International Telemedicine Program, King Edward VII Memorial Hospital
Teleconference from Boston, MA, to Hamilton, Bermuda
- 2005 Discontinuation of mechanical ventilation / Lecture
The Brain and beyond: Creative initiatives in the care of individuals with neurological
disease
Massachusetts General Hospital, Boston, MA.
- 2005 Inhalers and inhalation aids/ Lecture
Home oxygen therapy for the COPD patient / Lecture
Partners Asthma Center, Boston, MA.
- 2005 Mechanical ventilation of the patient with spinal cord injury / Lecture
Spaulding Rehabilitation Hospital, Boston, MA.
- 2006 Drug Delivery and devices / Lecture
Partners Asthma Center, Boston, MA.
- 2006 Gadgets and gizmos for aerosol delivery / Lecture
Partners Asthma Center, Boston, MA.
- 2006 Management of the spinal cord injured patient who has a tracheostomy / Lecture
Spaulding Rehabilitation Hospital, Boston, MA.
- 2006 Discontinuing mechanical ventilation – by protocol? / Lecture
Harvard Critical Care and Trauma Symposium, Boston, MA.
- 2007 Mechanical ventilation of the patient with asthma / Asthma Grand Rounds
Brigham and Women's Hospital, Boston, MA.
- 2008 Mechanical Ventilation: Primum non nocere / Grand Rounds
Anesthesia and Critical Care
Massachusetts General Hospital, Boston, MA.
- 2008 Noninvasive positive pressure ventilation; Ancillary therapies for ARDS / Lecture

- Harvard Critical Care and Trauma Symposium, Boston, MA.
- 2008 Anatomy of the ventilator / Lecture
Harvard Critical Care and Trauma Symposium, Boston, MA.
- 2008-2009 Mechanical Ventilation / Lecture
Fundamental Critical Care Support Course
Massachusetts General Hospital, Boston, MA.
- 2008-2009 Mechanical Ventilation *Primum non nocere* / Lecture
Harvard Pulmonary Medicine Postgraduate Course
Boston, MA
- 2009 Respiratory Management / Lecture
MGH Limb Girdle Muscular Dystrophy Symposium, Boston, MA.
- 2009-2013 Aerosol Delivery Devices / Lecture
MGH Pediatric Intensive Care Lecture Series, Boston, MA.
- 2010 Aerosol Delivery Devices / Pharmacy Grand Rounds
Massachusetts General Hospital, Boston, MA
- 2010 New Ventilator Modes / Lecture
BWH/Harvard CME Critical Care Board Review Studio Course.
Boston, MA
- 2010 Weaning from Mechanical Ventilation / Lecture
BWH/Harvard CME Critical Care Board Review Studio Course
Boston, MA
- 2010, 2013 Monitoring the Patient on Mechanical Ventilation / Lecture
BWH/Harvard CME Critical Care Board Review Studio Course
Boston, MA
- 2010-2015 Advanced Ventilator Modes – What’s new and what’s worth keeping? / Lecture
Harvard Pulmonary Medicine Postgraduate Course
Boston, MA
- 2011 New Ventilator Modes / Pulmonary Grand Rounds
Pulmonary and Critical Care Medicine
Massachusetts General Hospital, Boston, MA
- 2013 Invasive and Noninvasive Ventilation / Lecture
BWH/Harvard CME Critical Care Board Review Studio Course
Boston, MA
- 2013 New Ventilator Modes / Lecture
BWH/Harvard CME Critical Care Board Review Studio Course.

Boston, MA

- 2013 Ventilator Liberation / Lecture
BWH/Harvard CME Critical Care Board Review Studio Course.
Boston, MA
- 2014 Moving from Reaction to Prediction: Leveraging High Speed Data Recording and
Advanced Computational Tools for Prediction of Sedation-Related Adverse Events in
Children / Discussant
Radcliffe Institute for Advanced Study
Harvard University, Cambridge, MA
- 2016 High-flow oxygen therapy: How does it work? When should it be used? / Lecture
Harvard Pulmonary Medicine Postgraduate Course
Boston, MA
- 2017 Noninvasive respiratory support / Lecture
Harvard Pulmonary Medicine Postgraduate Course
Boston, MA
- 2018 Noninvasive respiratory support / Lecture
Harvard Pulmonary Medicine Postgraduate Course
Boston, MA

Report of Regional, National and International Invited Teaching and Presentations

Invited Presentations and Courses

Regional

- 1989 Weaning from mechanical ventilation / Lecture
Dartmouth Medical Center, Lebanon, NH
- 1990 Noninvasive monitoring in respiratory care / Lecture
Respiratory Care Research / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA
- 1993 Monitoring and graphical display / Lecture
St. Vincent Hospital, Worcester, MA
- 1993 Waveforms and lung mechanics during mechanical ventilation / Lecture
Danbury Hospital, Danbury, CT
- 1993 Waveforms and lung mechanics during mechanical ventilation / Lecture
Dosage considerations during mechanical ventilation / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA
- 1994 Respiratory equipment and ventilator-associated pneumonia / Lecture
St. Vincent Medical Center, Worcester, MA

- 1994 Respiratory care equipment and nosocomial pneumonia / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA
- 1995 Ventilator-induced lung injury / Lecture
Massasoit Community College, Brockton, MA
- 1995 Waveforms and mechanics during mechanical ventilation / Lecture
Dartmouth-Hitchcock Respiratory Critical Care Conference, Nashua, NH
- 1995 Respiratory care at the crossroads / Lecture
Massachusetts Thoracic Society, Burlington, MA
- 1995 What does the future hold? / Graduation address for respiratory therapy students
Massasoit Community College, Brockton, MA
- 1996 Noninvasive positive pressure ventilation / Critical Care Grand Rounds
Saints Memorial Medical Center, Lowell, MA
- 1996 Waveforms and mechanics during mechanical ventilation / Lecture
Rhode Island Society for Respiratory Care, Newport, RI
- 1996 Respiratory care at the crossroads / Lecture
St. Vincent's Hospital Respiratory and Critical Care Review, Worcester, MA
- 1996 Mechanical ventilation and artificial airways / Lecture
Braintree Rehabilitation Conference, Cambridge, MA
- 1997 Inhaled nitric oxide / Lecture
Maine Society for Respiratory Care, Portland, ME
- 1998 Inhaled nitric oxide / Lecture
Boston Medical Center, Boston, MA
- 1998 Choosing a ventilator for noninvasive ventilation / Lecture
Brown University and Rhode Island Hospital, Newport, RI
- 1998 Mechanical ventilation of the patient with asthma / Lecture
Respiratory care at the crossroads / Lecture
Connecticut Society for Respiratory Care, Foxwoods, CT
- 1998 Mechanical ventilation / Lecture
Society of Critical Care Medicine Critical Care Providers' course
Beverly Hospital, Beverly, MA
- 1999 Indications for noninvasive ventilation / Lecture
Rhode Island Hospital Noninvasive Ventilation Course, Newport, RI
- 1999 Respiratory equipment and ventilator-associated pneumonia / Lecture

- Maine Society for Respiratory Care, Rockland, ME
- 1999 Mechanical ventilation / Lecture
Society of Critical Care Medicine Critical Care Providers' course
Beverly Hospital, Beverly, MA
- 2000 Inhaled nitric oxide / Lecture
Regional Respiratory Care Meeting, Springfield, MA
- 2000 Noninvasive positive pressure ventilation / Lecture
Maine Society for Respiratory Care, Portland ME
- 2000 What's new in masks and ventilators for noninvasive ventilation? / Lecture
Rhode Island Hospital Noninvasive Ventilation Program, Providence, RI
- 2000 Monitoring during mechanical ventilation / Lecture
Graphics and mechanics during mechanical ventilation / Lecture
Noninvasive positive pressure ventilation / Lecture
Maine Medical Center, Portland, ME
- 2000 Update on aerosol delivery devices / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA
- 2001 BiPAP and other ventilatory aids / Lecture
ALS Society of Massachusetts, Dedham, MA
- 2001 Mechanical ventilation of the patient with ARDS / Lecture
Southcoast Hospital System, Dartmouth, MA
- 2001 Aerosol Delivery During Mechanical Ventilation / Lecture
Lahey Clinic, Burlington, MA
- 2001 Weaning from mechanical ventilation / Medical Grand Rounds
Worcester Medical Center, Worcester, MA
- 2002 Weaning from mechanical ventilation / Lecture
Rhode Island Society for Respiratory, Care Newport, RI
- 2002 Aerosol delivery techniques / Lecture
Massachusetts Thoracic Society, Burlington, MA
- 2002 Weaning from mechanical ventilation / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA
- 2002 Noninvasive positive pressure ventilation / Lecture
Dartmouth-Hitchcock Medical Center, Lebanon, NH
- 2002 New ventilator modes – where and when do we use them? / Lecture
Achieving Success with Noninvasive Ventilation / Lecture

- Tufts University School of Medicine, Braintree, MA
- 2003 Mechanical ventilation of the patient with acute lung injury / Lecture
Union Hospital, Lynn, MA
- 2003 Monitoring lung mechanics during mechanical ventilation / Lecture
Community College of Rhode Island, Lincoln, RI
- 2003 Monitoring during mechanical ventilation / Lecture
Naugatuck Valley Community College, Waterbury, CT
- 2003 Ventilator management of ARDS / Lecture
Quinnipiac University, Hamden, CT
- 2003 Weaning from mechanical ventilation / Lecture
Northern Essex Community College, Lawrence, MA
- 2003 Topics in mechanical ventilation / Medicine/Surgery Grand Rounds
North Shore Medical Center/Union Hospital, Lynn, MA
- 2003 Advances in mechanical ventilation: what's worth keeping? / Lecture
Weaning from mechanical ventilation / Lecture
Catholic Medical Center, Manchester, NH
- 2004 New ventilator modes / Lecture
Rhode Island Community College, Lincoln, RI
- 2004 Evidence-based medicine / Lecture
Northern Essex Community College, Lawrence, MA
- 2004 Evidence-based medicine / Lecture
Naugatuck Valley Community College, Waterbury, CT
- 2004 What is evidence-based medicine and why should I care? / Lecture
Champlain College, Burlington, VT
- 2004 New modes: Do they make a difference? / Lecture
Patient-ventilator synchrony / Lecture
Inhaled therapies: heliox, nitric oxide, and aerosols / Lecture
Tufts New England Medical Center, Boston, MA
- 2005 Evaluating waveforms and lung mechanics in the mechanically ventilated patient / Lecture
Manchester Community College, Manchester, CT
- 2005 Mechanical ventilation of the patient with ARDS / Lecture
Northern Essex Community College, Lawrence, MA
- 2005 Mechanical ventilation of the patient with ARDS / Lecture

- Rhode Island Community College, Lincoln, RI
- 2005 Mechanical ventilation of the patient with ARDS / Lecture
Naugatuck Valley Community College, Waterbury, CT
- 2005 Tracheostomy and facilitating speech in the patient with tracheostomy / Lecture
Springfield Technical Community College / Springfield, MA
- 2005 Advances in mechanical ventilation / Lecture
60th Annual Meeting of the Massachusetts Thoracic Society, Weston, MA
- 2005 What is evidence-based respiratory care and why should I care? / Lecture
Maine Society for Respiratory Care, Boothbay ME
- 2005 Noninvasive positive pressure ventilation / Lecture
Weaning from mechanical ventilation / Lecture
Maine Society for Respiratory Care, Bangor, ME
- 2005 What is evidence-based respiratory care / Lecture
COPD treatment and options for inhaled drug delivery / Lecture
Vermont/New Hampshire Society for Respiratory Care, Waterville Valley, NH
- 2005 Lung mechanics and graphics during mechanical ventilation / Lecture
Mechanical ventilation of the patient with obstructive lung disease / Lecture
Weaning from mechanical ventilation / Lecture
Tracheostomy tubes and facilitating speech in the patient with a tracheostomy / Lecture
Maine Medical Center, Portland, ME
- 2005 What's new in masks and ventilators for noninvasive ventilation? / Lecture
Tufts New England Medical Center, Newton, MA
- 2006 Noninvasive positive pressure ventilation / Lecture
Community College of Rhode Island, Lincoln, RI
- 2006 Techniques for prevention of ventilator-associated pneumonia / Lecture
Naugatuck Valley Community College, Waterbury, CT
- 2006 Weaning from mechanical ventilation / Lecture
Springfield Technical Community College, Springfield, MA
- 2006 Evaluating waveforms and lung mechanics in the mechanically ventilated patient / Lecture
Manchester Community College / Manchester, CT
- 2006 Weaning from mechanical ventilation / Lecture
Northern Essex Community College, Lawrence, MA
- 2006 Weaning from mechanical ventilation; Tracheostomy tubes and facilitating speech in the patient with a tracheostomy / Lecture

- 3rd Annual Berkshire Trauma Symposium, Berkshire, MA
- 2006 What is evidence-based respiratory care? / Lecture
Rhode Island Society for Respiratory Care, Newport, RI
- 2006 Use of prone ventilation / Lecture
New noninvasive ventilation techniques / Lecture
Open lung strategies for ARDS / Lecture
What's new in masks, ventilators for NIV / Lecture
Tufts University 8th Annual Conference in Mechanical Ventilation, Tufts, University,
Quincy, MA
- 2006 The evidence for aerosol delivery techniques / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA
- 2006 Noninvasive ventilation – 2006 Update / Lecture
Tracheostomy tubes and facilitating speech in the patient with a tracheostomy tube /
Lecture
Vermont/New Hampshire Society for Respiratory Care, Mt. Snow, VT
- 2007 Ventilator modes / Lecture
ICU Consortium of Boston / Boston, MA
- 2007 Patient-ventilator dys-synchrony / Lecture
Manchester Community College, Manchester, CT
- 2007 What is evidence-based respiratory care? / Lecture
Community College of Rhode Island, Lincoln, RI
- 2007 Techniques for acute NIV – what's new? / Lecture
NIV for ALI/ARDS (con) / Debate
Interfaces and ventilator choices for acute NIV / Lecture
9th Annual Conference in Mechanical Ventilation: New Trends. Tufts New England
Medical Center, Newton, MA
- 2007 Respiratory care of the patient with ALS / Lecture
New England Sinai Hospital, Stoughton, MA
- 2007 Evidence-based respiratory care / Lecture
Naugatuck Valley Community College, Waterbury, CT
- 2007 Evidence-based respiratory care / Lecture
Springfield Technical Community College, Springfield, MA
- 2007 Respiratory care of the patient with neuromuscular disease / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA
- 2007 Management of COPD exacerbation / Lecture

Northern Essex Community College / Lawrence, MA

- 2008 Patient-ventilator dys-synchrony / Lecture
Manchester Community College, Manchester, CT
- 2008 Mechanical ventilation: State of the art / Lecture
The art of respiratory care / Lecture
What's new in noninvasive ventilation? / Lecture
Tufts University Mechanical Ventilation Course, Newton, MA
- 2008 Mechanical Ventilation: Primum non nocere / Lecture
Northern Essex Community College / Lawrence, MA
- 2008 Techniques to avoid intubation / Lecture
The Council of Pulmonary Service Managers of Western Massachusetts, Springfield, MA
- 2009 Patient-ventilator dys-synchrony / Lecture
Manchester Community College, Manchester, CT
- 2009 State of the art of mechanical ventilation / Lecture
Springfield Technical Community College, Springfield, MA
- 2009 Advances in mechanical ventilation. First do no harm / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA
- 2010 Advances in mechanical ventilation / Lecture
Lahey Clinic, Burlington, MA
- 2010 Noninvasive ventilation: 2010 Update / Grand Rounds
New England Sinai Hospital, Stoughton, MA
- 2010 I know I should do that ... but the evidence gets in the way / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA
- 2010 Using teamwork to improved respiratory care / Lecture
New England Sinai Hospital Better Breathers IX, Norwood, MA
- 2011 Patient-ventilator dys-synchrony / Lecture
Manchester Community College, Manchester, CT
- 2912 Evaluation of respiratory mechanics during mechanical ventilation/Lecture
New England Sinai Hospital, Stoughton, MA
- 2012 Mechanical ventilation of the patient with obstructive lung disease / Lecture
Manchester Community College, Manchester, CT
- 2012 Liberation from mechanical ventilation / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA

- 2012 Invasive and noninvasive ventilation for the patient with neuromuscular disease / Lecture
Spaulding Hospital, Cambridge, MA
- 2013 Mechanical ventilation of the patient with obstructive lung disease / Lecture
Manchester Community College, Manchester, CT
- 2013 Five things I learned about mechanical ventilation in the past 40 years / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA
- 2014 What is evidence-based respiratory care? / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA
- 2015 Mechanical ventilation of the patient with obstructive lung disease / Lecture
Manchester Community College, Manchester, CT
- 2015 Respiratory Care at 65 / Lecture
Massachusetts Society for Respiratory Care, Sturbridge, MA
- 2016 Mechanical ventilation of the patient with obstructive lung disease / Lecture
Manchester Community College, Manchester, CT
- 2016 A physiologic approach to identify and treat flow and mode asynchrony / Lecture
Challenges in Mechanical Ventilation and Airway Technologies
Massachusetts General Hospital and Harvard Medical School
Boston, MA
- 2016 Five Things I Learned about Mechanical Ventilation in the Past 40 Years / Lecture
Tufts Medical Center, Boston, MA
- 2017 Mechanical Ventilation 2017 - State of the Art / Lecture
Initiating NIV and High Flow Nasal O₂ / Workshop
The 2017 Debate: NIV for Hypoxemic Respiratory Failure - Is It Dead? / Debate
Trends in Mechanical Ventilation 2017; Tufts Medical Center, Waltham, MA
- 2017 Technical/Application Issues with the Use of NIV / Lecture
Tracheostomy Tube Management / Lecture
Challenges in Mechanical Ventilation and Airway Technologies
Massachusetts General Hospital and Harvard Medical School
Boston, MA
- 2017 Noninvasive Respiratory Support / Lecture
The Council of Pulmonary Service Managers
Holyoke, MA
- 2018 NIV vs. HFNC vs. early intubation in respiratory failure / Debate
Oxygen – high or low supplementation / Debate
Acute Respiratory Failure and Mechanical Ventilation
Massachusetts General Hospital

Boston, MA

- 2018 When Less is More / Lecture
Massachusetts Society for Respiratory Care
Tauton, MA
- 2018 Mechanical Ventilation for Severe Asthma and COPD / Lecture
Tufts University Medical Center
Boston, MA
- 2020 Lung Protective Ventilation: Volume, Pressure, Neither, or Both?
Mechanical Ventilation for Severe Asthma / Lecture
Tufts University Medical Center
Boston, MA
- National**
- 1986 Noninvasive monitoring of oxygenation / Lecture
Ohio Society for Respiratory Care, Columbus, OH
- 1987 Emergency ventilation techniques / Lecture
Washington Society for Respiratory Care, Spokane, WA
- 1987 Goal-oriented respiratory care / Lecture
St. Vincent's Charity Hospital, Cleveland, OH
- 1988 Respiratory care research / Lecture
Pennsylvania Society for Respiratory Care, Philadelphia, PA
- 1988 Noninvasive monitoring of oxygenation / Lecture
Weaning from mechanical ventilation / Lecture
New Jersey Society for Respiratory Care, Atlantic City, NJ
- 1988 History of pulmonary function testing / Lecture
Respiratory Care Journal Conference, St. Petersburg, FL
- 1989 Capnography / Lecture
St. Vincent's Charity Hospital, Cleveland, OH
- 1989 Weaning from mechanical ventilation / Lecture
Baptist Medical Center, Memphis, TN
- 1989 Pulse oximetry and capnography / Visiting Professor
Cleveland Clinic, Cleveland OH
- 1990 Ten commandments for the care of the patient with COPD / Lecture
Aerosol delivery techniques / Lecture

- Annenberg Center Satellite Conference, Palm Springs, CA
- 1990 Aerosol delivery to mechanically ventilated patients / Lecture
Annenberg Center Respiratory Care Conference, Palm Springs, CA
- 1990 Aerosol delivery to mechanically ventilated patients / Lecture
Kansas Society for Respiratory Care / Kansas City, KS
- 1990 Noninvasive monitoring in respiratory care / Lecture
The NBRC examinations / Lecture
Maryland/DC Society for Respiratory Care / Ocean City, MD
- 1990 Noninvasive monitoring in respiratory care / Visiting Professor
Mayo Clinic, Rochester, MN
- 1991 Aerosol therapy delivery techniques / Lecture
Noninvasive monitoring in respiratory care / Lecture
Michigan Society for Respiratory Care, Grand Rapids, MI
- 1991 Aerosol therapy during mechanical ventilation / Lecture
Region II Respiratory Care meeting, Cincinnati, OH
- 1991 Respiratory care research / Lecture
Maryland/DC Society for Respiratory Care, Ocean City, MD
- 1991 Aerosol therapy delivery techniques / Lecture
Noninvasive monitoring in respiratory care / Lecture
Michigan Society for Respiratory Care, Grand Rapids, MI
- 1991 Aerosol therapy during mechanical ventilation / Lecture
Region II Respiratory Care Meeting, Cincinnati, OH
- 1991 Aerosol therapy delivery techniques / Lecture
Noninvasive monitoring in respiratory care / Lecture
Washington Society for Respiratory Care, Tacoma, WA
- 1991 Aerosol therapy delivery techniques / Lecture
Noninvasive monitoring in respiratory care / Lecture
Washington Society for Respiratory Care, Tacoma, WA
- 1991 Respiratory care research / Lecture
Maryland/DC Society for Respiratory Care, Ocean City, MD
- 1991 Noninvasive monitoring in respiratory care / Lecture
Hospital for Sick Children, Washington, DC
- 1992 Aerosol delivery techniques / Lecture
Noninvasive ventilation in acute respiratory failure / Lecture

Washington Thoracic Society, Seattle, WA

- 1992 Monitoring respiratory mechanics during mechanical ventilation / Lecture
Kaiser Medical Center, Los Angeles, CA
- 1992 Aerosol delivery during mechanical ventilation / Lecture
Monitoring during resuscitation / Lecture
Pennsylvania Society for Respiratory Care, Seven Springs, PA
- 1992 Respiratory care research / Workshop
Michigan Society for Respiratory Care, Lansing, MI
- 1992 Quality control and quality assurance of blood gas analysis - what is the difference /
Lecture
Data management / Benchmark Lecture Series / Lecture
Denver, CO (Instrumentation Laboratories)
- 1992 Quality control and quality assurance of blood gas analysis - what is the difference /
Lecture
Data management / Benchmark Lecture Series / Lecture
Denver, CO, Columbia, MD (Instrumentation Laboratories)
- 1992 Quality control and quality assurance of blood gas analysis - what is the difference /
Lecture
Data management / Lecture
Benchmark Lecture Series, Charlotte, NC (Instrumentation Laboratories)
- 1992 Aerosol delivery of ribavirin and pentamidine - Current issues and controversies / Lecture
Update on bronchodilator aerosols in respiratory care / Lecture
Texas Society for Respiratory Care, San Antonio, TX
- 1992 NBRC Agency Update; Blueprint for success on the Clinical Simulation Examination /
Lecture
American Association for Respiratory Care Summer Forum Naples, FL
- 1992 Clinical Practice Guidelines practice guidelines and therapist driven protocols / Lecture
North Carolina Society for Respiratory Care, Atlantic Beach, NC
- 1992 Aerosol Administration / Lecture
Professor's Rounds in Respiratory Care
AARC/VHA Satellite Video Conference, Dallas TX
- 1992 Respiratory care - Looking towards the year 2000 / Lecture
Non-invasive ventilation in acute respiratory failure / Lecture
NBRC update / Lecture
Hawaii Society for Respiratory Care, Honolulu, HI

- 1992 Quality control and quality assurance of blood gas analysis - what is the difference? /
Lecture
Data management / Lecture
Benchmark Lecture Series, Honolulu, HI (Instrumentation Laboratories)
- 1992 Monitoring lung mechanics during mechanical ventilation / Lecture
Clinical Practice Guidelines / Lecture
Ohio Society for Respiratory Care, Columbus, OH
- 1992 Aerosol delivery technique / Lecture
Monitoring lung mechanics during mechanical ventilation / Lecture
Alfred A. DuPont Medical Center, Wilmington, DE
- 1992 Quality control and quality assurance of blood gas analysis - what is the difference? /
Lecture
Data management / Lecture
Benchmark Lecture Series, Dallas, TX (Instrumentation Laboratories)
- 1993 Aerosol delivery techniques / Lecture
Primedica satellite video series, Denver, CO
- 1993 Clinical Practice Guidelines practice guidelines / Lecture
Evaluation of waveforms and lung mechanics during mechanical ventilation / Lecture
Pennsylvania Society for Respiratory Care, Seven Springs, PA
- 1993 Quality control and quality assurance of blood gas analysis - what is the difference? /
Lecture
Data management / Lecture
Benchmark Lecture Series, Miami, FL (Instrumentation Laboratories)
- 1993 Quality control and quality assurance of blood gas analysis - what is the difference? /
Lecture
Data management / Lecture
Benchmark Lecture Series, Atlanta, GA (Instrumentation Laboratories)
- 1993 Research primer / Lecture
Controversies in aerosol delivery techniques / Lecture
North Dakota Society for Respiratory Care, Bismarck, ND
- 1993 Research for respiratory therapists / Lecture
Pennsylvania Society for Respiratory Care, Philadelphia, PA
- 1993 Capnography / Lecture
American Thoracic Society Meeting, San Francisco, CA
- 1993 Lung mechanics and waveforms during mechanical ventilation / Lecture
St. Vincent's Charity Hospital, Cleveland, OH

- 1993 Objective evaluation of equipment / Lecture
University of Texas Medical Branch, Galveston, TX
- 1993 NBRC Agency Update and Results of the 1992 NBRC job analysis / Lecture
AARC Summer Forum, Vail, CO
- 1993 Waveforms and lung mechanics during mechanical ventilation / Lecture
Primedica satellite video series, Denver, CO
- 1993 Clinical Practice Guidelines / Lecture
New York Society for Respiratory Care, Newburgh, NY
- 1993 Blood gas analysis – pre-analytical and postanalytical considerations / Lecture
OSHA requirements regarding bloodborne pathogens / Lecture
Instrumentation Laboratories Benchmark Series, Minneapolis, MN
- 1993 Blood gas analysis - preanalytical and postanalytical considerations / Lecture
OSHA requirements regarding bloodborne pathogens / Lecture
Instrumentation Laboratories Benchmark Series, Indianapolis, IN
- 1993 Clinical Practice Guidelines practice guidelines / Lecture
Kentucky Society for Respiratory Care, Lexington, KY
- 1993 Waveforms and lung mechanics during mechanical ventilation / Lecture
American Lung Association, Syracuse, NY
- 1993 Clinical Practice Guidelines / Lecture
New Jersey Society for Respiratory Care, Atlantic City, NJ
- 1993 Aerosol delivery during mechanical ventilation / Lecture
The future of respiratory care / Lecture
NBRC update / Lecture
Conducting the literature search as part of the research process / Lecture
Novel methods for aerosol drug delivery / Lecture
Capnography / Lecture
American Association for Respiratory Care Congress, Nashville, TN
- 1994 Noninvasive monitoring in respiratory care / Lecture
Carolinas Medical Center, Charlotte, NC
- 1994 Noninvasive respiratory monitoring / Lecture
International Healthcare Satellite Series, Denver, CO
- 1994 Invasive respiratory monitoring / Lecture
International Healthcare Satellite Series, Denver, CO
- 1994 Novel approaches to therapeutic aerosol administration / Lecture
Region II Respiratory Care Meeting, Cincinnati, OH

- 1994 Respiratory equipment and ventilator-associated pneumonia and respiratory care research /
Lecture
Virginia Society for Respiratory Care, Virginia Beach, VA
- 1994 Aerosol delivery during mechanical ventilation / Lecture
St. Vincent's Charity Hospital, Cleveland, OH
- 1994 Respiratory care research / Lecture
Inhaled nitric oxide / Lecture
Update on NBRC matrix / Lecture
Texas Society for Respiratory Care, Corpus Christi, TX
- 1994 Waveforms and mechanics during mechanical ventilation / Lecture
ARDS / Lecture
Maryland/DC Society for Respiratory Care, Ocean City, NJ
- 1994 Techniques of aerosolized drug administration / Lecture
Inhaled nitric oxide / Lecture
St. Mary's Hospital Respiratory Care Conference, West Palm Beach, FL
- 1994 Inhaled nitric oxide / Lecture
Waveforms and mechanics during mechanical ventilation / Lecture
Ohio Society for Respiratory Care, Columbus, OH
- 1994 Five things I learned this year about respiratory diagnosis and monitoring / Lecture
Management of bronchospasm in intubated patients / Lecture
Monitoring the ventilator / Lecture
American Association for Respiratory Care Congress, Las Vegas, NV
- 1995 Waveforms and mechanics during mechanical ventilation / Lecture
Ventilator-induced lung injury / Lecture
Oregon Society for Respiratory Care, Eugene, OR
- 1995 Inhaled nitric oxide / Lecture
Ventilator-induced lung injury / Lecture
Region II Respiratory Care Meeting, Cincinnati, OH
- 1995 Inhaled nitric oxide / Lecture
Ventilator-induced lung injury / Lecture
Miami Valley Hospital Trauma Program, Dayton, OH
- 1995 Five things I learned in the last year about respiratory monitoring and diagnosis / Lecture
St. Vincent's Charity Hospital, Cleveland, OH
- 1995 Waveforms and mechanics during mechanical ventilation / Lecture
Aerosol delivery during mechanical ventilation / Lecture
Ventilator circuit changes and ventilator-associated pneumonia / Lecture

California Society for Respiratory Care, San Diego, CA

- 1995 Waveforms and mechanics during mechanical ventilation / Lecture
Inhaled Nitric Oxide / Lecture
Forsyth Memorial Hospital, Winston-Salem, NC
- 1995 Waveforms and mechanics during mechanical ventilation / Lecture
Kentucky Society for Respiratory Care, Louisville, KY
- 1995 Waveforms and mechanics during mechanical ventilation / Lecture
How to survive restructuring / Lecture
Northern California Neonatal/Pediatric Network, Lafayette, CA
- 1995 Respiratory care at the crossroads: Evolution or extinction / Lecture
AARC Clinical Practice Guidelines / Lecture
Respiratory monitoring in the ICU / Lecture
What is a null hypothesis, what is a P value? / Lecture
American Association for Respiratory Care, Orlando, FL
- 1996 The role of the respiratory therapist in research / Lecture
Pennsylvania Society for Respiratory Care, Philadelphia, PA
- 1996 How to set the ventilator / Lecture
AARC video conference series, Dallas, TX
- 1996 Respiratory care at the crossroads / Lecture
Prevention of ventilator-induced lung injury / Lecture
North Carolina Society for Respiratory Care, New Bern, NC
- 1996 Therapist-driven protocols and clinical practice guidelines / Lecture
South Miami Hospital, Miami, FL
- 1996 Respiratory care at the crossroads / Lecture
Aerosol delivery during mechanical ventilation / Lecture
Inhaled nitric oxide for ARDS / Lecture
Napa Valley Respiratory Care Conference, Napa, CA
- 1996 Success rates and predictors of success for noninvasive ventilation / Lecture
ARCF Consensus Conference on Noninvasive Mechanical Ventilation, Vail, CO
- 1996 Inhaled nitric oxide / Lecture
Prevention of ventilator-induced lung injury / Lecture
Evaluation of waveforms and mechanics during mechanical ventilation / Lecture
York Hospital, York, PA
- 1996 Inhaled nitric oxide / Lecture
Holy Spirit Hospital, Camp Hill, PA

- 1996 Inhaled nitric oxide / Lecture
Fairfax Medical Center, Fairfax, VA
- 1996 Respiratory care at the crossroads / Lecture
Prevention of ventilator-induced lung injury / Lecture
Illinois Society for Respiratory Care, Finley, IL
- 1996 How to know which ventilator to purchase / Lecture
Clinical Practice Guidelines / Lecture
Conference for medical directors of respiratory care, San Diego, CA
- 1996 ATS guidelines for in-patient management of COPD / Lecture
How to measure outcomes / Lecture
Research ethics / Lecture
Inhaled nitric oxide / Lecture
Annual convention of the American Association for Respiratory Care, San Diego, CA
- 1997 Prevention of ventilator-associated lung injury / Lecture
Buffalo General Hospital Mechanical Ventilation course, Buffalo, NY
- 1997 Prevention of ventilator-associated lung injury / Lecture
Noninvasive positive pressure ventilation / Lecture
Prone position and inhaled nitric oxide / Lecture
Pressure controlled ventilation / Lecture
Nassau County Medical Center, East Meadow, NY
- 1997 Use of waveforms during mechanical ventilation / Lecture
American Thoracic Society, San Francisco, CA
- 1997 Inhaled nitric oxide / Lecture
University of Rochester/Strong Memorial Hospital, Rochester, NY
- 1997 Aerosol delivery techniques / Lecture
NCS Healthcare, Mansfield, OH
- 1997 Full ventilatory support of alveolar ventilation / Lecture
Noninvasive positive pressure Ventilation / Lecture
ACCP Mechanical Ventilation Course, San Diego, CA
- 1997 Respiratory care at the crossroads -- evolution of extinction? / Lecture
Noninvasive monitoring in adult respiratory care / Lecture
California Society for Respiratory Care, Monterey, CA
- 1997 Inhaled nitric oxide: Issues and answers / Lecture
AARC videoconference, Dallas, TX
- 1997 Inhaled nitric oxide / Lecture
Downstate Medical Center/Brooklyn VA Hospital, Brooklyn, NY

- 1997 Aerosol delivery and Inhaled nitric oxide / Lecture
Mercy Hospital Regional Respiratory Care Meeting, Sacramento, CA
- 1997 Inhaled nitric oxide / Lecture
Mayo Clinic Foundation, Distinguished Didier Lecture, Rochester, MN
- 1997 Noninvasive positive pressure ventilation for acute respiratory failure / Lecture
Akron General Hospital, Akron, OH
- 1997 Use of waveforms during mechanical ventilation / Lecture
American College of Chest Physicians, New Orleans, LA
- 1997 Mechanical ventilation of the asthmatic patient / Lecture
Central New York Lung Association, Syracuse, NY
- 1998 Inhaled nitric oxide / Lecture
Johns Hopkins University, Baltimore, MD
- 1998 Respiratory care at the crossroads / Lecture
Noninvasive positive pressure ventilation / Lecture
Pennsylvania Society for Respiratory Care, Seven Springs, PA
- 1998 Ventilator-associated lung injury / Lecture
Fairview Hospital, Cleveland, OH
- 1998 Inhaled nitric oxide and noninvasive positive pressure ventilation / Lecture
Ohio State University, Columbus, OH
- 1998 Inhaled nitric oxide / Lecture
Ventilator-associated lung injury / Lecture
Michigan Society for Respiratory Care, Lansing, MI
- 1998 Initiation of noninvasive ventilation and monitoring the effect / Lecture
American Thoracic Society post-graduate course, Chicago, IL
- 1998 Ventilator-associated lung injury / Lecture
Noninvasive ventilation for acute respiratory failure / Lecture
Oklahoma Lung Association, Oklahoma City, OK
- 1998 Nuts and bolts of noninvasive ventilation / Lecture
Mayo Clinic Foundation Critical Care Course, Rochester, MN
- 1998 Noninvasive positive pressure ventilation / Lecture
American College of Chest Physicians Mechanical Ventilation course, Baltimore, MD
- 1998 Monitoring during mechanical ventilation / Lecture
Inhaled nitric oxide / Lecture

- Guidelines and protocols for mechanical ventilation / Lecture
University of Minnesota Mechanical Ventilation Course, Minneapolis, MN
- 1998 Weaning from mechanical ventilation / Lecture
Noninvasive positive pressure ventilation / Lecture
Mercy Hospital Respiratory Care Conference, Sacramento, CA
- 1998 Weaning from mechanical ventilation / Lecture
American Association for Respiratory Care Satellite Conference, Dallas, TX
- 1998 Noninvasive positive pressure ventilation / Lecture
University of Michigan Medical Center, Ann Arbor, MI
- 1998 Graphics and mechanics during mechanical ventilation / Lecture
Noninvasive positive pressure ventilation / Lecture
Ventilator testing / Lecture
Weaning from mechanical ventilation / Lecture
Future uses for inhaled nitric oxide / Lecture
Protocols for weaning from mechanical ventilation / Lecture
Nosocomial pneumonia and respiratory equipment / Lecture
American Association for Respiratory Care International Congress, Atlanta, GA
- 1999 Noninvasive positive pressure ventilation / Lecture
Pennsylvania Society for Respiratory Care, Seven Springs, PA
- 1999 Critique of noninvasive ventilators for use in the home / Lecture
Practical aspects of NPPV in the ICU / Lecture
Practical aspects of initiation of NPPV / Lecture
Is NPPV applicable to patients with ARDS? / Lecture
Airway management in the ICU / Lecture
World Congress on Noninvasive Ventilation, Orlando, FL
- 1999 Ventilators and their management / Lecture
AARC Satellite Conference, Dallas, TX
- 1999 Selecting a mode. Choosing the correct equipment for noninvasive ventilation / Lecture
American Thoracic Society Postgraduate Course, San Diego, CA
- 1999 Mechanical ventilation for parenchymal lung disease / Lecture
Noninvasive positive pressure ventilation / Lecture
Noninvasive ventilation workshop / Lecture
American College of Chest Physicians Mechanical Ventilation Course, Phoenix, AZ
- 1999 Techniques to improve oxygenation / Lecture
Weaning from mechanical ventilation / Lecture
Illinois Society for Respiratory Care, Chicago, IL
- 1999 Respiratory equipment and nosocomial pneumonia / Lecture

- Heliox and inhaled nitric oxide / Lecture
California Society for Respiratory Care, Ventura, CA
- 1999 Noninvasive positive pressure ventilation and prone positioning / Lecture
Mercy St. John Medical Center, St. Louis, MO
- 1999 Monitoring during mechanical ventilation / Lecture
Inhaled nitric oxide / Lecture
University of Minnesota Mechanical Ventilation course, Minneapolis, MN
- 1999 New modes of mechanical ventilation and weaning from mechanical ventilation /
Lecture
Indiana Society for Respiratory Care, Indianapolis, IN
- 1999 Mechanical ventilation of the patient with COPD and exotic gas therapy – heliox and
inhaled nitric oxide / Lecture
Mercy Hospital/California Society for Respiratory Care, Sacramento, CA
- 1999 New modes of mechanical ventilation / Lecture
York Hospital, York, PA
- 1999 Weaning from mechanical ventilation / Lecture
Pressure controlled ventilation / Lecture
Holy Spirit Hospital, Camp Hill, PA
- 1999 Inhaled nitric oxide – background / Lecture
Inhaled nitric oxide delivery systems / Lecture
How to conduct an in-service / Lecture
INO Therapeutics Inhaled Nitric Oxide Program, Dallas, TX
- 2000 Noninvasive positive pressure ventilation / Lecture
Multidisciplinary case presentation / Lecture
Society of Critical Care Medicine, Orlando, FL
- 2000 Inhaled nitric oxide – background / Lecture
Inhaled nitric oxide delivery systems / Lecture
Evidence for use of inhaled nitric oxide / Lecture
How to conduct an in-service / Lecture
INO Therapeutics Inhaled Nitric Oxide Program, Orlando, FL
- 2000 Mechanical ventilation precourse workshop / Lecture
Monitoring during mechanical ventilation / Lecture
Noninvasive positive pressure ventilation / Lecture
Approaches to respiratory care under managed care / Lecture
The future of respiratory care / Lecture
University of Southern California Critical Care Symposium, Las Vegas, NV

- 2000 Tracheal gas insufflation and related techniques to introduce gas flow into the trachea /
Lecture
Respiratory Care Journal Conference on Tracheal Gas Insufflation, Dallas, TX
- 2000 Monitoring in respiratory care: What goes and what stays / Lecture
AARC Satellite Conference, Dallas, TX
- 2000 Mechanical ventilation of the patient with asthma and aerosol drug delivery / Lecture
St. John's Mercy Medical Center, Departments of Critical Care Medicine and
Respiratory Care, St. Louis, MO
- 2000 Monitoring the patient with acute respiratory failure / Lecture
Monitoring of mechanics/gas exchange / Lecture
Mechanical ventilation: Principles and applications / Lecture
University of Minnesota, Minneapolis, MN
- 2000 Ventilator-associated lung injury / Lecture
Noninvasive positive pressure ventilation / Lecture
Mechanical ventilation of the patient with obstructive lung disease / Lecture
Inhaled nitric oxide for sickle cell disease / Lecture
Monitoring oxygenation, Monitoring resistance and compliance / Lecture
Proportional assist ventilation / Lecture
Pro/Con - aerosol therapy is an occupational hazard for respiratory therapists / Lecture
American Association for Respiratory Care International Convention, Cincinnati, OH
- 2000 Mechanical ventilation of the patient with parenchymal lung disease / Lecture
Mechanical ventilation of the patient with obstructive lung disease / Lecture
Noninvasive positive pressure ventilation / Lecture
Oxygen therapy for sleep and exercise / Lecture
Pro/con: Use of pressure-volume curves to set the ventilation / Lecture
Pro/con: Use of active versus passive humidification during mechanical ventilation /
Lecture
Weaning from mechanical ventilation / Panel
American College of Chest Physicians, San Francisco, CA
- 2000 Inhaled nitric oxide / Lecture
Noninvasive positive pressure ventilation for acute respiratory failure / Lecture
Northeast Pulmonary Teaching Conference, Ithaca, NY
- 2001 Pressure-volume curves and ARDS management / Lecture
Nassau County Medical Center, Long Island, NY
- 2001 Mechanical ventilation / Lecture
Noninvasive ventilation / Lecture
Monitoring during mechanical ventilation / Lecture
University of Southern California 39th Annual Symposium on Critical Care, Trauma,
and Mechanical Ventilation, Las Vegas, NV

- 2001 Noninvasive positive pressure ventilation / Lecture
AARC Satellite Conference, Dallas, TX
- 2001 Physiology of mechanical ventilation – Noninvasive ventilation and noninvasive ventilation – the role of nurses and respiratory therapists / Lecture
American Thoracic Society, San Francisco, CA
- 2001 New concepts in aerosol delivery / Lecture
Evaluation of graphics and mechanics during mechanical ventilation / Lecture
California Society for Respiratory Care, Los Angeles, CA
- 2001 Aerosol medication delivery / Lecture
Weaning from mechanical ventilation / Lecture
Heliox therapy / Lecture
Mercy/St. John Medical Center, St. Louis, MO
- 2001 Noninvasive positive pressure ventilation / Lecture
Duke University Medical Center, Durham, NC
- 2001 Mechanical ventilation of the patient with COPD / Lecture
Weaning from mechanical ventilation / Lecture
North Carolina Society for Respiratory Care, Wilmington, NC
- 2001 Mechanical ventilation of the patient with ARDS / Lecture
Minnesota Society for Respiratory Care, St. Cloud, MN
- 2001 Inhaled nitric oxide / Lecture
St. Francis Medical Center, Tulsa, OK
- 2001 Noninvasive positive pressure ventilation / Lecture
York Hospital Medical Grand Rounds, York, PA
- 2001 Ventilator-induced lung injury / Lecture
Capital District of the Pennsylvania Society for Respiratory Care, York, PA
- 2001 Patient-ventilator dyssynchrony / Lecture
Weaning from mechanical ventilation / Lecture
Noninvasive positive pressure ventilation / Lecture
Adjuncts for mechanical ventilation / Lecture
ACCP Postgraduate course on mechanical ventilation (co-director), Philadelphia, PA
- 2001 Equipment for noninvasive ventilation in the home / Lecture
Simon Rodbard Memorial Honor Lecture – Advances in mechanical ventilation: What's worth keeping? / Lecture
ACCP Annual Convention, Philadelphia, PA
- 2001 Monitoring during mechanical ventilation / Lecture
Monitoring gas exchange / Lecture

University of Minnesota Mechanical Ventilation Course, Minneapolis, MN

- 2001 Inhaled nitric oxide / Lecture
Medical City of Dallas, Dallas, TX
- 2002 New modes of mechanical ventilation / Lecture
Washington University. Pulmonary and Critical Care Medicine Grand Rounds, St. Louis, MO
- 2002 Heliox therapy / Lecture
Noninvasive positive pressure ventilation / Lecture
Society for Critical Care Medicine, San Diego, CA
- 2002 Weaning from mechanical ventilation / Lecture
Satellite Conference – Meet the Professor, Dallas, TX
- 2002 Evidence for secretion clearance techniques / Lecture
Noninvasive positive pressure ventilation / Lecture
INOVA Fairfax Medical Center, Fairfax, VA
- 2002 Evidence-based respiratory care / Lecture
King’s Mountain Symposium, Bristol, TN
- 2002 Noninvasive positive pressure ventilation / Lecture
Techniques to improve secretion clearance / Lecture
American Thoracic Society, Atlanta, GA
- 2002 The role of respiratory equipment in the development of nosocomial pneumonia / Lecture
Consensus Conference, ICU-Acquired Pneumonia, Chicago, IL
- 2002 Evidence-based respiratory care / Lecture
Ohio Society for Respiratory Care, Cleveland, OH
- 2002 New modes and features of mechanical ventilation / Lecture
Advances in mechanical ventilation – what’s worth keeping? / Lecture
Evidence-based secretion clearance / Lecture
St-John’s Mercy Medical Center, St. Louis, MO
- 2002 Weaning from mechanical ventilation / Lecture
Maryland/DC Society for Respiratory Care, Ocean City, MD
- 2002 Noninvasive positive pressure ventilation / Lecture
Advances in mechanical ventilation – what’s worth keeping? / Lecture
Pulmonary and Critical Care Symposium, Sacramento, CA
- 2002 How to do an effective PowerPoint presentation / Lecture
What is evidence-based respiratory care? / Lecture

- 20 years of progress in secretion clearance techniques / Discussion Section
American Association for Respiratory Care International Congress, Tampa, FL
- 2002 Noninvasive positive pressure ventilation / Lecture
Mechanical ventilation of the patient with obstructive lung disease / Lecture
Pharmacological adjuncts to mechanical ventilation / Lecture
American College of Chest Physicians, San Diego, CA
- 2002 Monitoring during mechanical ventilation / Lecture
Monitoring gas exchange / Lecture
Ventilator roundtable / Panel
University of Minnesota Mechanical Ventilation Course, Minneapolis, MN
- 2003 Mechanical ventilation of the patient with acute lung injury / Lecture
Weaning from mechanical ventilation / Lecture
Oregon Society for Respiratory Care, Portland, OR
- 2003 Practical update on mechanical ventilation / Lecture
Weaning from mechanical ventilation / Lecture
Noninvasive positive pressure ventilation / Lecture
New modes and features of mechanical ventilators / Lecture
University of Southern California Critical Care, Trauma, and Emergency Medicine
Symposium, Las Vegas, NV
- 2003 Weaning from mechanical ventilation / Lecture
New modes and features of mechanical ventilators / Lecture
Pinnacle Health Systems Pulmonary Care Symposium, Harrisburg, PA
- 2003 Advances in mechanical ventilation – what’s worth keeping? / Lecture
Liberation for mechanical ventilation – weaning the patient or weaning old-fashioned ideas
/ Lecture
Michigan Society for Respiratory Care, Lansing, MI
- 2003 Evidence-based respiratory care – why should I care? / Lecture
Advances in mechanical ventilation – what’s worth keeping? / Lecture
Northeast Pulmonary Teaching Conference, Syracuse, NY
- 2003 Mechanical ventilation of the patient with ARDS / Lecture
King’s Mountain Symposium, Bristol, TN
- 2003 Equipment needs for noninvasive ventilation / Lecture
American Thoracic Society, Seattle, WA
- 2003 New ventilator modes – fact versus fantasy / Lecture
Johns Hopkins University. Anesthesia Grand Round, Baltimore, MD
- 2003 Noninvasive positive pressure ventilation / Lecture
Applications of exhaled carbon dioxide monitoring / Lecture

Minnesota Society for Respiratory Care, Mankato, MN

- 2003 New ventilator modes and features / Lecture
West Virginia Society for Respiratory Care, Roanoke, WV
- 2003 Sedation and paralysis of the mechanically ventilated patient / Lecture
AARC Satellite Conference, Dallas, TX
- 2003 View from the cockpit. Lessons learned from aviation to improve patient safety / Lecture
Cerner Conference, Kansas City, MO
- 2003 Practical application of NPPV: Is new technology better? / Lecture
Case-based use of ventilator graphics during mechanical ventilation / Lecture
Evidence-based guidelines for selection of an aerosol delivery device / Lecture
American College of Chest Physicians, Orlando, FL
- 2003 What is evidence-based medicine and why should I care? / Lecture
The evidence for noninvasive positive pressure ventilation / Lecture
Improving patient synchrony during noninvasive ventilation / Lecture
How to conduct a retrospective study / Lecture
The role of the respiratory therapist in prevention of ventilator-associated pneumonia /
Lecture
American Association for Respiratory Care Annual Convention, Las Vegas, NV
- 2004 Heliox and inhaled nitric oxide / Lecture
American Association for Respiratory Care. Professor's Rounds, Dallas, TX
- 2004 Weaning from mechanical ventilation and protocols / Webcast presenter
American Association for Respiratory Care. Dallas, TX.
- 2004 Techniques to avoid intubation and Invasive ventilation of the patient with COPD /
Lecture
Society of Critical Care Medicine, Orlando, FL
- 2004 Noninvasive positive pressure ventilation and aerosol delivery during mechanical
ventilation / Lecture
Oregon Thoracic Society, Redmond, OR
- 2004 Advances in mechanical ventilation – What's worth keeping? / Lecture
Noninvasive positive pressure ventilation / Lecture
The University of Texas Health Science Center at San Antonio, San Antonio, TX
- 2004 Noninvasive positive pressure ventilation / Lecture
Evidence-based respiratory care / Lecture
Wisconsin Society for Respiratory Care, Wisconsin Dells, WS
- 2004 Ventilator-associated pneumonia and the role of the respiratory therapist / Webcast
presenter

AARC, Dallas, TX

- 2004 Respiratory Care in the ICU / Lecture
AARC Corporate Sponsorship Meeting, Dallas, TX
- 2004 Noninvasive positive pressure ventilation / Lecture
St. Joseph Hospital, Asheville, NC
- 2004 Ventilator-associated pneumonia and the role of the respiratory therapist / Lecture
Evidence based respiratory care / Lecture
Virginia Society for Respiratory Care, Virginia Beach, VA
- 2004 Is there a role for new ventilator modes? / Postgraduate Course on Mechanical Ventilation
American Thoracic Society, Orlando, FL
- 2004 Mechanical ventilation of the patient with ARDS / Lecture
Evidence-based respiratory care / Lecture
Washington Society for Respiratory Care, Seattle, WA
- 2004 Options for inhaled drug delivery / Lecture
AARC Summer Forum, Vail, CO
- 2004 Noninvasive positive pressure ventilation / Lecture
Advances in mechanical ventilation – what’s worth keeping? / Lecture
California Society for Respiratory Care, San Diego, CA
- 2004 Graphics and mechanics during mechanical ventilation: Using the ventilator as a probe of pathophysiology / Lecture
Ventilation of the COPD patient / Lecture
Management of COPD – Options for treatment and inhaled drug delivery / Lecture
Maryland/DC Conference by the Sea, Ocean City, MD
- 2004 Ventilator-associated pneumonia and the role of the respiratory therapist / Lecture
Safety, effectiveness, and the AARC clinical practice guidelines / Lecture
American Association for Respiratory Care, Professor’s Rounds, Dallas, TX
- 2004 What is evidence-based medicine? / Lecture
Inhaled nitric oxide therapy / Lecture
Aerosol delivery / Lecture
Hawaii Society for Respiratory Care, Honolulu, HI
- 2004 Prevention of VAP / Lecture
Noninvasive positive pressure ventilation / Lecture
Pulmonary and Critical Care Symposium, Sacramento, CA
- 2004 Mechanical ventilation of the patient with ARDS / Lecture
Noninvasive positive pressure ventilation: The science and the art / Lecture

York Hospital/Pennsylvania Society for Respiratory Care, York, PA

- 2004 Noninvasive positive pressure ventilation: the nuts and bolts / Lecture
 Advances in ventilators for NIV / Lecture
 The weak link: the mask for NIV / Lecture
 The nuts and bolts of pediatric noninvasive ventilation / Workshop
 Ventilator options for accomplishing NPPV in the pediatric population / Lecture
 How to incorporate guidelines and the strength of recommendations / Lecture
 Heliox usage with nebulizers and mechanical ventilation / Lecture
 Multi-disciplinary approach to patient-focused care: Acute and long-term NPPV / Lecture
 American College of Chest Physicians), Seattle, WA
- 2004 What is Evidence Based Medicine? / Lecture
 Weaning From Mechanical Ventilation / Lecture
 7th Annual Respiratory Care Conference, Fairview Hospital, Cleveland, OH
- 2004 Tracheostomy tubes and related appliances / Lecture
 Facilitation of speech in the patient with a tracheostomy / Lecture
 New nebulizer designs / Lecture
 American Association for Respiratory Care International Conference, New Orleans, LA
- 2005 Mechanical ventilation of the patient with ARDS / Lecture
 Tracheostomy tubes and facilitating speech in the patient with tracheostomy / Lecture
 Evaluating waveforms and lung mechanics in the mechanically ventilated patient / Lecture
 Mercy/St. John Medical Center, St. Louis, MO
- 2005 Ventilator graphics / Lecture
 What's new in masks and ventilators for noninvasive ventilation? / Lecture
 Society of Critical Care Medicine, Phoenix, AZ
- 2005 Heliox therapy / Webcast presenter
 American Association for Respiratory Care, Dallas, TX
- 2005 What is evidence-based medicine? / Lecture
 Advances in mechanical ventilation / Lecture
 19th Annual High Country Conference on Respiratory Care, Boone, NC
- 2005 Ventilator graphics / Webcast presenter
 American Association for Respiratory Care, Dallas, TX
- 2005 What is evidence-based medicine? / Lecture
 Patient-ventilator synchrony / Lecture
 25th Annual Conference at the Slopes, Pennsylvania Society for Respiratory Care,
 Seven Springs, PA
- 2005 Mechanical ventilation of the patient with ARDS / Lecture
 MD Anderson Cancer Center; Innovative Therapies in Critical Care Medicine,
 Houston, TX

- 2005 COPD and treatment options for inhaled drug delivery / Lecture
Virginia Society for Respiratory Care, Virginia Beach, VA
- 2005 Modern therapeutic approaches to asthma/COPD therapy / Lecture
American Association of Pharmaceutical Scientists Workshop on Nasal and Pulmonary
Delivery, San Francisco, CA.
- 2005 Mechanical ventilation of the patient with obstructive lung disease / Lecture
Workshop on noninvasive ventilation techniques / Lecture
Workshop on feedback loops and mechanical ventilation / Lecture
Long inspiratory times and other recruitment strategies / Lecture
Adjuncts to mechanical ventilation / Lecture
American College of Chest Physicians. Mechanical Ventilation 2005, La Jolla, CA
- 2005 Noninvasive positive pressure ventilation. 2005 Update / Lecture
American Association for Respiratory Care Professors Rounds, Dallas, TX.
- 2005 Mechanical ventilation of the patient with ARDS / Lecture
Tracheostomy tubes and facilitating speech in the patient with tracheostomy / Lecture
Maryland/DC Society for Respiratory Care, Ocean City, MD
- 2005 Heliox and noninvasive ventilation / Lecture
Ventilator waveforms in the patient with ARDS / Lecture
Guidelines for selection of an aerosol delivery device / Lecture
51st International Respiratory Congress, San Antonio, TX
- 2006 Prevention of ventilator-associated pneumonia: Role of the respiratory therapist / Lecture
Weaning from mechanical ventilation / Lecture
20th Annual High Country Conference on Respiratory Care, Boone, NC
- 2006 Emergency airway management workshop / Lecture
Features and modes of the modern ventilator: What features do we need? / Lecture
Update on noninvasive ventilation / Lecture
44th Annual Symposium on Critical Care, Trauma, and Emergency Medicine,
Las Vegas, NV
- 2006 The mask and aerosol delivery / Lecture
International Society for Aerosols in Medicine, Miami, FL
- 2006 Noninvasive positive pressure ventilation / Lecture
Evaluating graphics and lung mechanics during mechanical ventilation / Lecture
Michigan Society for Respiratory Care, Lansing, MI
- 2006 Techniques for prevention of ventilator-associated pneumonia / Lecture
MD Anderson Hospital, Houston, TX
- 2006 The evidence for aerosol delivery techniques / Lecture

- Evaluation of waveforms and lung mechanics in the patient with ALI/ARDS / Lecture
Washington Society for Respiratory Care, Spokane, WA
- 2006 Facilitation of speech in the patient with tracheostomy / Lecture
Cardiothoracic Surgical Critical Care 2006, Washington DC
- 2006 New respiratory therapy concepts and technologies / Lecture
31st Annual Congress of the Oncologist Nurses Society, Boston, MA
- 2006 What is evidence-based respiratory care? / Lecture
Management of COPD: Role of the respiratory therapist / Lecture
Kansas Society for Respiratory Care, Topeka, KS
- 2006 Equipment needs for noninvasive ventilation / Lecture
American Thoracic Society, San Diego, CA
- 2006 The evidence for aerosol delivery techniques / Lecture
COPD update: Role of the respiratory therapist / Lecture
Virginia Society for Respiratory Care, Virginia Beach, VA
- 2006 The evidence for aerosol delivery techniques / Lecture
COPD update: Role of the respiratory therapist / Lecture
Illinois Society for Respiratory Care, Chicago, IL
- 2006 The evidence for aerosol delivery techniques / Lecture
Evaluating waveforms and lung mechanics in the mechanically ventilated patient / Lecture
Georgia Society for Respiratory Care, Saint Simonds Island, GA
- 2006 The evidence for aerosol delivery techniques / Lecture
Ohio Society for Respiratory Care, Columbus, OH
- 2006 The evidence for aerosol delivery techniques / Lecture
NPPV – 2006 Update / Lecture
Maryland/DC Society for Respiratory Care, Ocean City, MD
- 2006 Inhaled nitric oxide / Lecture
Memorial Hermann – Texas Medical Center, Houston, TX.
- 2006 The evidence for aerosol delivery techniques / Lecture
North Carolina Society for Respiratory Care, Charlotte, NC
- 2006 The evidence for aerosol delivery techniques / Lecture
New York State Society for Respiratory Care, Verona, NY
- 2006 Advances in mechanical ventilation: Primum non nocere (First do no harm) / Lecture
Patient ventilator dys-synchrony / Lecture
Mercy-St. John Medical Center, St. Louis, MO

- 2006 Mechanical ventilation of the patient with ARDS / Lecture
Mechanical ventilation of the patient with obstructive lung disease / Lecture
Noninvasive ventilation workshop / Lecture
Neuromuscular respiratory failure / Lecture
Noninvasive positive pressure ventilation – 2006 update / Lecture
New nebulizer designs / Lecture
Spacers and valved holding chambers / Lecture
COPD – an interactive session / Lecture
American Association for Respiratory Care International Congress, Las Vegas, NV
- 2007 Emergency airway management workshop / Lecture
Weaning from mechanical ventilation / Lecture
How many knobs do I need on my ventilator? / Lecture
University of Southern California 45th Annual Symposium on Critical Care, Trauma and
Emergency Medicine, Las Vegas, NV
- 2007 Anatomy of the ventilator / Lecture
Cardiothoracic Surgical Critical Care 2007, Washington, DC
- 2007 Appropriate use of aerosol devices / Webcast presenter
Dallas, TX. American Association for Respiratory Care, Dallas, TX
- 2007 Respiratory care in 2020 / Lecture
Breath-actuated/conserving nebulizers are best / Lecture
Cleveland Clinic 2007 Lung Summit. Cleveland, OH
- 2007 Guidelines for selection of an aerosol delivery device / Lecture
14th Annual King's Mountain Pulmonary Symposium, Bristol, TN
- 2007 Mechanical ventilation for the patient with ARDS / Lecture
Patient-ventilator synchrony / Lecture
Maryland/DC Society for Respiratory Care, Ocean City, NJ
- 2007 Aerosol delivery for the patient with asthma / Lecture
Respiratory Care Journal Conference, Scottsdale, AZ
- 2007 Aerosol generation and delivery – the devices / Lecture
American College of Chest Physicians, Chicago, IL
- 2007 Navigating the course of aerosol delivery – the road less traveled ... or more / Lecture
American College of Allergy, Asthma, and Immunology, Dallas, TX
- 2007 Interdisciplinary management of the patient with a tracheostomy or ventilator / Lecture
American Speech-Language-Hearing Association, Boston, MA
- 2007 Mechanical ventilation for the patient with COPD / Lecture
Noninvasive positive pressure ventilation workshop / Lecture
Noninvasive ventilation should be used for all forms of acute respiratory failure / Lecture

- Pharmacological prevention of VAP / Lecture
Patient-ventilator dyssynchrony / Lecture
American Association for Respiratory Care Annual Congress, Orlando, TX
- 2008 Weaning from mechanical ventilation / Lecture
Cardiothoracic Surgical (CTS) Critical Care 2008, Washington, DC
- 2008 Weaning from mechanical ventilation / Lecture
Noninvasive ventilation for malignancies / Lecture
Strategic Practices of Critical Care Medicine, The University of Texas M.D. Anderson
Cancer Center, Houston, TX
- 2008 Pediatric noninvasive ventilation / Lecture
Techniques of noninvasive ventilation / Lecture
University of Arkansas Diamond Conference, Little Rock, AR
- 2008 Mechanical ventilation of the patient with ARDS / Lecture
Noninvasive positive pressure ventilation / Lecture
Mechanical ventilation of the patient with asthma / Lecture
Aerosol delivery during mechanical ventilation / Lecture
American College of Physicians, Washington, DC
- 2008 What is evidence-based respiratory care? / Lecture
Lehigh Valley Hospital Center, Allentown, PA
- 2008 What is evidence-based respiratory care? / Lecture
Texas Society for Respiratory Care, South Padre Island, TX
- 2008 Advances in mechanical ventilation: First do no harm / Lecture
Jewish Hospital, Louisville, KY
- 2008 Evidence for airway clearance techniques / Lecture
The art of respiratory care / Lecture
North Regional Respiratory Care Conference
- 2008 Advances in mechanical ventilation: First do no harm / Lecture
The future of respiratory care / Lecture
MD/DC Society for Respiratory Care, Ocean City, MD
- 2008 Equipment for noninvasive ventilation / Lecture
Workshop: The ventilator for noninvasive ventilation / Lecture
PEEP: Bringing the evidence to the bedside / Lecture
Patient-ventilator synchrony with pressure support ventilation / Lecture
Noninvasive and invasive ventilation for patients with neuromuscular disease / Lecture
International Congress of the American Association for Respiratory Care, Anaheim, CA
- 2009 Mechanical ventilation and the equation of motion / Lecture
Society of Critical Care Medicine, Nashville, TN

- 2009 Advances in mechanical ventilation: First do no harm / Lecture
Salisbury University, Salisbury, MD
- 2009 Noninvasive ventilation: 2009 update / Lecture
AARC Professor's Rounds, Dallas, TX
- 2009 Mechanical ventilation of the patient with ARDS / Lecture
Noninvasive positive pressure ventilation / Lecture
Mechanical ventilation of the patient with asthma / Lecture
American College of Physicians, Philadelphia, PA
- 2009 Noninvasive ventilation: optimizing technique, minimizing failure / Lecture
Measurements of respiratory mechanics: the value of the transpulmonary pressure /
Lecture
Using ventilator waveforms to your clinical advantage / Lecture
American Thoracic Society, San Diego, CA
- 2009 Noninvasive ventilation: 2009 Update / Lecture
Jewish Hospital, Louisville, KY
- 2009 Management of the ventilator discontinuation process / Lecture
Computer control and feedback systems - What can and cannot be done / Lecture
Noninvasive ventilation workshop / Lecture
AARC Summer Forum. Mechanical Ventilation for Educators and Managers, Marco
Island, FL
- 2009 Optimizing mechanical ventilation / Lecture
Eleventh Annual Rainbow Respiratory Conference, Cleveland OH
- 2009 How to set PEEP in the patient with ALI/ARDS / Lecture
Should we use low tidal volume in everyone? / Lecture
Hawaii Society for Respiratory Care, Honolulu, HI
- 2009 Approaches to difficult weaning and mobilization in the ICU / Lecture
Cardiovascular Thoracic Critical Care Congress, Washington, DC
- 2009 Advances in mechanical ventilation: First do no harm / Lecture
Patient-ventilator synchrony / Lecture
Washington Adventist Hospital, Tacoma Park, WA
- 2009 Teamwork in the ICU / Didier Lecture/Critical Care Grand Rounds
Mayo Clinic, Rochester, MN
- 2009 Mechanical ventilation adjuncts / Lecture
Mechanical ventilation of the patient with COPD / Lecture
The mask for noninvasive ventilation / Lecture
When to use PEEP / Lecture

- Invasive approach to diagnosis of ventilator-associated pneumonia / Lecture
How the Respiratory Care journal works / Lecture
International Congress of the American Association for Respiratory Care,
San Antonio, TX
- 2010 Mechanical ventilation of the patient with neuromuscular disease / Lecture
Patient-ventilator dys-synchrony / Lecture
Society of Critical Care Medicine, Miami, FL
- 2010 New ventilator modes – An evidence-based approach / Lecture
11th Annual Course in Mechanical Ventilation and Critical Care, Emory University,
Atlanta, GA
- 2010 Anatomy of the ventilator and noninvasive ventilation / Lecture
48th Annual USC Weil Symposium on Critical Care and Emergency Medicine,
University of Southern California, Palm Springs, CA
- 2010 Lung protective ventilation strategies / Lecture
Strategic Practices of Critical Care Medicine, MD Anderson Hospital, Houston, TX
- 2010 Monitoring respiratory mechanics / Lecture
Monitoring during noninvasive ventilation / Lecture
American Thoracic Society, University of Southern California, New Orleans, LA
- 2010 Optimum PEEP and tidal volume / Lecture
Liberation from mechanical ventilation / Lecture
Ventilator Summit 2010, Cleveland Clinic Foundation, Cleveland, OH
- 2010 Monitoring gas exchange / Lecture
AARC Professor Rounds, Dallas, TX
- 2010 Management of the ventilator withdrawal process / Lecture
AARC Summer Forum, Marco Island, FL
- 2010 How to maximize noninvasive ventilation / Lecture
How to use PEEP / Lecture
Fifteenth Annual Challenges in Critical Care, Penn State University, Hershey, PA
- 2010 Refractory hypoxemic respiratory failure / Lecture
MD/DC Society for Respiratory Care, Ocean City, MD
- 2010 Mechanical ventilation of the patient with ARDS / Lecture
Arkansas Society for Respiratory Care, Hot Springs, AR
- 2010 New ventilator modes / Lecture
FACTS-Care, Washington, DC
- 2010 Noninvasive ventilation / Lecture

- Preventing complications / Lecture
Regions Hospital Optimizing Mechanical Ventilation 2010, St. Paul, MN
- 2010 Management of the ventilator discontinuation process / Lecture
Conventional ventilation of the patient with ARDS / Lecture
High-frequency oscillatory ventilation should be part of your institution's armamentarium for managing severe ALI-ARDS – Con / Lecture
The top 5 original research papers published in respiratory care in 2010 / Lecture
The role of the respiratory therapist in the management of asthma / Lecture
56th International Respiratory Congress, Las Vegas, NV
- 2011 Patient-ventilator synchrony during volume-controlled ventilation / Lecture
Society of Critical Care Medicine Congress, San Diego, CA
- 2011 New modes of mechanical ventilation / Lecture
Society of Thoracic Surgery Congress, San Diego, CA
- 2011 Optimizing noninvasive ventilation / Lecture
What is the role of spontaneous breathing trials? / Lecture
Approaches to prolonged mechanical ventilation / Lecture
International Conference on Comprehensive Mechanical Ventilation, Orlando Regional Medical Center, Orlando, FL
- 2011 Current indications for oxygen: Looking at the evidence / Lecture
Long Term Oxygen Therapy Conference, Orlando, FL
- 2011 Interfaces and ventilators for noninvasive ventilation / Lecture
Noninvasive ventilation. Optimizing technique and minimizing failure / Lecture
International Conference of the American Thoracic Society, Denver, CO
- 2011 Mechanical ventilation of the patient with obstructive lung disease / Lecture
The ventilator liberation process / Lecture
Lung-protective ventilation – the importance of PEEP / Lecture
The role of noninvasive ventilation in the ventilator liberation process / Lecture
Approaches to noninvasive ventilation – the North American perspective / Lecture
The 5 best case reports published in Respiratory Care in 2011 / Lecture
57th International Respiratory Congress, Tampa, FL
- 2011 Mechanical ventilation of the patient with obstructive lung disease / Lecture
Liberation from mechanical ventilation / Lecture
Missouri Society for Respiratory Care, Springfield, MO
- 2012 Mechanical ventilation – First do no harm / Lecture
39th Annual Pacific Northwest Regional Respiratory Care Conference and Scientific Assembly, Spokane, WA
- 2012 Conventional ventilation for the patient with ARDS / Lecture
Early mobility – role of the respiratory therapist / Lecture

- Ventilator liberation – role of protocols / Lecture
 Pro-con: Should rescue therapies be used for severe ARDS? / Lecture
 Respiratory Sepsis, Society for Critical Care Medicine, Boston, MA
- 2012 Inhaled gases and aerosols / Lecture
 The ventilator discontinuation process / Lecture
 Advances in Critical Care Treatments, MD Anderson Cancer Center, Houston, TX
- 2012 Patient assessment / Lecture
 Oxygen therapy / Lecture
 Invasive mechanical ventilation / Lecture
 Noninvasive mechanical ventilation / Lecture
 Management of the patient with COPD / Lecture
 American Association for Respiratory Care, Dallas, TX
- 2012 Advances in mechanical ventilation: First do no harm / Lecture
 MD/DC Society for Respiratory Care, Ocean City, MD
- 2012 Inhaled gases and aerosols / Lecture
 Liberation from mechanical ventilation / Lecture
 Robert Packer Hospital, Sayre, PA
- 2012 Bedside evaluation of respiratory mechanics / Lecture
 Noninvasive ventilation / Lecture
 Neurally adjusted ventilatory assist / Lecture
 Preventing complications / Lecture
 Optimizing mechanical ventilation / Lecture
 HealthPartners Institute for Medical Education, St. Paul, MN
- 2012 Conventional ventilation of the patient with acute respiratory distress syndrome / Lecture
 Lung Summit: Controversies in pulmonary medicine, critical care medicine, and
 mechanical ventilation, Cleveland, OH
- 2012 Mechanical ventilation of the patient with obstructive lung disease / Lecture
 The ventilator liberation process / Lecture
 The 5 best case reports published in Respiratory Care in 2012 / Lecture
 Science and evidence: Separating fact from fiction / Lecture
 Year in review: Noninvasive ventilation / Lecture
 Pro-con: Is a full-featured ventilator necessary? / Lecture
 Update on the Journal Respiratory Care / Lecture
 Approaches to PEEP selection in patients with ARDS / Lecture
 From VAP to VAE: Implications for the respiratory therapist / Lecture
 58th International Respiratory Congress, New Orleans, LA
- 2013 How managers and educators can get the most from their journal / Lecture
 AARC Summer Forum, Orlando, FL
- 2013 Modes of noninvasive ventilation and mask interfaces employed / Lecture

International Society for Aerosols in Medicine, Chapel Hill, NC

- 2013 Is there a role for new ventilator modes? / Lecture
5th Critical Care Symposium at Long Beach Memorial Hospital, Long Beach, CA
- 2013 What is evidence-based medicine and why should I care? / Lecture
Duke University 11th Optimizing Mechanical Ventilation Conference, Durham, NC
- 2013 Respiratory mechanics / Lecture
American Thoracic Society, Philadelphia, PA
- 2013 Tracheostomy tubes / Lecture
Adult Airways and Airway Adjuncts, Tampa, FL
- 2013 From VAP to VAE / Lecture
AARC Professors Rounds, Dallas, TX
- 2013 From ventilator-associated pneumonia to ventilator-associated events / Lecture
Five things I learned about mechanical ventilation in the past 40 years / Lecture
Hawaii Society for Respiratory Care, Honolulu, HI
- 2013 From ventilator-associated pneumonia to ventilator-associated events / Lecture
Queen's Medical Center, Honolulu, HI
- 2013 Five things I learned about mechanical ventilation in the past 40 years / Lecture
What is evidence-based medicine and why should I care? / Lecture
New York Society for Respiratory Care, Syracuse, NY
- 2013 High frequency ventilation in adults: Indicated or contraindicated? / Lecture
Ventilator-associated events: What every respiratory therapist should know / Lecture
Respiratory mechanics during positive pressure ventilation / Lecture
What's in the journal this month? How can the clinician, manager, and educator get the most from their journal? / Lecture
The 5 best case reports published in Respiratory Care in 2013 / Lecture
International Congress of the American Association for Respiratory Care, Anaheim, CA
- 2014 Respiratory mechanics during positive pressure ventilation / Lecture
Advanced modes of mechanical ventilation / Lecture
Oregon Thoracic Society, Bend, OR
- 2014 Noninvasive positive pressure ventilation / Lecture
AARC Professors Rounds, Dallas, TX
- 2014 Advanced ventilator modes: Separating fact from fiction / Lecture
University of California, Irvine, CA
- 2014 Mechanical Ventilation / Workshop
Eisenhower Medical Center, Palm Springs, CA

- 2014 Five things I learned about mechanical ventilation in the past 40 years / Lecture
Georgia Society for Respiratory Care, Savannah, GA
- 2014 How to get the most from your Journal / Lecture
From ventilator-associated pneumonia to ventilator-associated events / Lecture
Indiana Society for Respiratory Care, Bloomington, IN
- 2014 Approaches to noninvasive ventilation / Lecture
PEEP and auto-PEEP / Lecture
Ventilation of the patient with obstructive lung disease / Lecture
Patient safety / Lecture
PEEP and recruitment maneuvers / Lecture
The 5 best case reports published in RESPIRATORYCARE in 2014/ Lecture
AARC Congress 2014; The 60th International Respiratory Convention & Exhibition, Las Vegas, NV
- 2015 Current and future objective monitors outside the ICU / Lecture
National Association for Medical Direction of Respiratory Care, Orlando, FL
- 2015 Five things I learned about mechanical ventilation in the past 40 years / Lecture
What is evidence-based respiratory care? / Lecture
Pennsylvania Society for Respiratory Care, King of Prussia, PA
- 2015 Ventilator modes for hypoxemic respiratory failure / Lecture
Preventing Lung Injury and Multiple Organ Dysfunction Syndrome from the Operating Room / Lecture
Proportional assist ventilation / Lecture
Society for Critical Care Medicine, Phoenix, AZ
- 2015 Respiratory care at 65 / Lecture
Massachusetts Society for Respiratory Care, Foxborough, MA
- 2015 PEEP and recruitment maneuvers
Noninvasive ventilation / Lecture
Cardiorespiratory interactions / Lecture
Analyzing mechanical ventilator graphics / Lecture
Pulse oximetry – Beyond SpO₂ / Lecture
Respiratory Compromise – Role of the respiratory therapist / Lecture
How to lie with statistics and figures: What’s a P anyway? / Lecture
Five common reasons why the editor will reject your paper / Lecture
AARC Congress 2015; The 61st International Respiratory Convention & Exhibition, Tampa, FL
- 2015 Nonconventional ventilator modes: Advance or distraction? / Lecture
Critical Care Grand Rounds, University of Alabama at Birmingham
- 2016 How Should We Set Positive End-Expiratory Pressure? / Lecture

- Open Lung Strategies - Setting Positive End-Expiratory Pressure / Workshop
 Mechanical Ventilation: Abdominal/Chest Wall Interactions / Lecture
 Delivery of Aerosolized Drugs / Lecture
 Trace Gases During Mechanical Ventilation / Lecture
 Hypoxemic Respiratory Failure: When Is Noninvasive Ventilation Appropriate? / Lecture
 Conversing with the Experts / Panel
 Society of Critical Care Medicine, 45th Critical Care Congress
- 2016 Respiratory Care at 65 / Lecture
 VAE Surveillance / Pro/Con
 Esophageal Pressure/Transpulmonary Pressure Monitoring / Pro/Con
 North Regional Respiratory Care conference, Rochester, MN
- 2016 Noninvasive respiratory support / Lecture
 How to set PEEP / Lecture
 Critical Care Best Practices 2016
 Baptist Health, Miami
- 2016 Five Things I Learned about Mechanical Ventilation in the Past 40 Years / Lecture
 Surgical-Medical Grand Rounds
 Iowa Methodist Medical Center
 Des Moines, IA
- 2016 Respiratory Care at 65 / Lecture
 How to Best Select PEEP / Lecture
 New York Society for Respiratory Care
 Verona, NY
- 2016 PEEP and Recruitment Maneuvers
 Respiratory Care at 65 ... A Magical Mystery Tour
 Hawaii Society for Respiratory Care
 Honolulu, HI
- 2016 Noninvasive respiratory support / Lecture
 Bristol Regional Medical Center
 Bristol, TN
- 2016 Inhaled Carbon Monoxide: From Toxin to Therapy / Lecture
 You Want to Get Published in Respiratory Care? 5 Tips from the Editor / Lecture
 Should We Use Volume Control to Ventilate a Patient with ARDS? Yes! / Lecture
 Noninvasive Respiratory Support / Lecture
 The 62nd International Respiratory Convention and Exhibition
 San Antonio, TX
- 2017 Five Things I Learned About Mechanical Ventilation in the Past 40 Years / Lecture
 Pulmonary and Critical Care Medicine Grand Rounds
 Winthrop University Hospital, Mineola, NY

- 2017 Respiratory Care – A View of the Past with an Eye on the Future / Lecture
Low Tidal Volumes Should Be Used for All Patients / Debate
APRV should not be used for ARDS / Debate
Pennsylvania Society for Respiratory Care
Valley Forge, PA
- 2017 Finding the evidence: separating science from fake news / Lecture
How to lie with statistics / Lecture
Summer Forum, American Association for Respiratory Care
Tucson, AZ
- 2017 How to lie with statistics / Lecture
Finding the evidence: separating science from fake news / Lecture
Retrospective studies and quality assurance / Lecture
The 63rd International Respiratory Convention and Exhibition
Indianapolis, TX
- 2017 Traditional and Novel Ways to Monitor Patients in the Post-Operative Period / Lecture
Society for Anesthesia and Sleep Medicine
Boston, MA
- 2017 Respiratory care – a view of the past with an eye on the future / Lecture
Massachusetts Society for Respiratory Care
Worcester, MA
- 2017 An evidence-based approach to mechanical ventilation of the patient with hypoxemic
respiratory failure / Lecture
An evidence-based approach to liberation from mechanical ventilation / Lecture
Eighth Annual State of the Science - Critical Care Best Practices Symposium
Baptist Health South Florida
Miami, FL
- 2018 Noninvasive respiratory support / Lecture
Society of Critical Care Medicine
San Antonio, FL
- 2018 Mechanical ventilation of patients with asthma and COPD / Lecture
American Thoracic Society
San Diego, CA
- 2018 Aerosol delivery during mechanical ventilation / Lecture
Suncoast Pulmonary Symposium
Fort Myers, FL
- 2018 Noninvasive respiratory support / Lecture
Ohio Society for Respiratory Care
Columbus, Ohio

- 2018 High flow nasal cannula – not just hot air / Lecture
Using a Literature Search to Define a Research Question / Lecture
American Association for Respiratory Care Congress
Las Vegas, NV
- 2019 Lung Protective Ventilation - Volume, Pressure, Neither, Or Both? / Lecture
York Hospital
York, PA
- 2019 Controlled Vs. Spontaneous Ventilation / Workshop
Refractory Hypoxemia – A Systemic Approach / Tutorial
High Flow Nasal Cannula for Whom? / Lecture
Applications and Advanced Options for Non-Invasive Ventilation / Tutorial
Mechanical Ventilation Conference, Mayo Clinic
Rochester, MN
- 2019 Noninvasive Respiratory Support / Lecture
York Hospital
York, PA
- 2019 High Flow Nasal Cannula for Hypoxemic Respiratory Failure / Lecture
Mistakes Made by New Authors / Lecture
Noninvasive Ventilation for COPD / Lecture
American Association for Respiratory Care Congress, New Orleans LA
- 2020 Noninvasive Respiratory Support / Virtual Lecture
Ohio Chapter of SCCM
- 2020 Safety and Efficacy of Noninvasive Respiratory Support in COVID-19 / Virtual Lecture
SCCM, COVID-19: What's Next
- 2020 47th Donald F. Egan Scientific Memorial Lecture: Evidence-Based Respiratory Care /
Virtual Lecture
Noninvasive Respiratory Support for COVID-19 / Virtual Lecture
Pro: Low Tidal Volumes Should Be Used for Everyone / Virtual Debate
American Association for Respiratory Care Live!
- International**
- 1987 The use of PEEP in clinical settings other than acute respiratory failure / Lecture
Respiratory Care journal conference, Ixtapa, MX
- 1989 Noninvasive monitoring in respiratory care - past present and future / Lecture
Capnography and capnometry: Technical aspects, physiologic aspects, and clinical
applications / Lecture
Respiratory Care journal conference, Ixtapa, MX
- 1991 Neonatal and pediatric respiratory care: Some implications for adult practitioners / Lecture

- Respiratory Care journal conference, Cancun, MX
- 1991 Monitoring during resuscitation / Lecture
Respiratory Care journal conference, Cancun, MX
- 1991 Aerosol therapy delivery techniques / Lecture
Noninvasive monitoring in respiratory care / Lecture
Alberta Society for Respiratory Care, Calgary, Alberta, CA
- 1992 Noninvasive monitoring in respiratory care / Lecture
Central American Respiratory Care Conference, Mexico City, MX
- 1992 Techniques and devices for monitoring oxygenation / Lecture
Respiratory Care journal conference, Puerto Vallarta, MX
- 1993 NBRC update and overview / Lecture
II Congreso Nacional en Terapia Respiratoria (Second National Respiratory Therapy Congress), Mexico City, MX
- 1993 Current state of the art of noninvasive monitoring in the ICU / Lecture
Respiratory management of the burn patient and hemodynamic monitoring / Lecture
Asia Pacific Association for Respiratory Care, Manila, Philippines
- 1993 Current state of the art of noninvasive monitoring in the ICU / Lecture
Philippine Pediatric Society Postgraduate Course in Critical Care Medicine, Davao, Philippines
- 1994 Nosocomial pneumonia during mechanical ventilation / Lecture
Waveforms and mechanics during mechanical ventilation / Lecture
Capnography and transcutaneous PCO₂ monitoring / Lecture
Aerosol bronchodilator delivery during mechanical ventilation / Lecture
Humidification during mechanical ventilation / Lecture
Asia-Pacific Respiratory Care Congress, Christchurch, New Zealand
- 1994 Techniques of emergency drug administration during resuscitation / Lecture
Respiratory Care journal conference on resuscitation in acute care hospitals, Cancun, Mexico
- 1995 Introduction of innovations in mechanical ventilation / Lecture
American Association for Respiratory Care Consensus Conference
Ixtapa, Mexico
- 1995 Waveforms and mechanics during mechanical ventilation / Lecture
Inhaled Nitric Oxide / Lecture
Asia Pacific Association for Respiratory Care, Nagoya, Japan
- 1995 Inhaled Nitric Oxide / Lecture

- Respiratory Care Journal Conference on New approaches to management of acute
Respiratory Failure, Cancun, Mexico.
- 1996 Monitoring during mechanical ventilation / Lecture
Circuits, humidification, and ventilator associated pneumonia / Lecture
Mechanical Ventilation Symposium, University of Toronto, Toronto, Ontario, Canada
- 1996 The role of the respiratory therapist in the ICU / Lecture
Respiratory Care Journal Conference, Cancun, Mexico
- 1997 Noninvasive positive pressure ventilation / Lecture
Tracheal gas insufflation / Lecture
Mechanical Ventilation Course, University of Toronto, Toronto, ON, Canada
- 1997 Graphic monitoring during mechanical ventilation / Lecture
Osaka University Medical Center, Osaka, Japan
- 1997 Therapeutic applications of heliox / Lecture
Japanese Society for Medial Gases, Tokyo, Japan
- 1998 Therapeutic Applications of Heliox / Lecture
Japanese Society for Medial Gases, Tokyo, Japan
- 1998 Adverse effects and toxicity of inhaled nitric oxide / Lecture
Respiratory Care Journal conference, Banff, Alberta, Canada
- 1998 Aerosol delivery during mechanical ventilation / Lecture
Use of spacers for aerosol delivery / Lecture
Mexican Association for Respiratory Care, Mexico City, Mexico
- 1998 Proportional assist ventilation and automatic tube compensation / Lecture
Techniques to improve oxygenation during mechanical ventilation / Lecture
American College of Chest Physicians, Toronto, Ontario, Canada
- 1998 Indications for translaryngeal intubation / Lecture
Management of the artificial airway / Lecture
Respiratory Care Journal Conference on Airway Management, Cancun, Mexico
- 1999 Monitoring oxygenation / Lecture
Respiratory Care Journal conference on Oxygen Therapy, Cancun, Mexico
- 1999 New nebulizer designs / Lecture
ARCF Aerosol Consensus Conference, Bermuda
- 1999 Monitoring pulmonary gas exchange and respiratory monitoring / Lecture
Asia Pacific Association for Respiratory Care, Beijing, China
- 1999 Monitoring in the Intensive Care Unit / Lecture

- Respiratory therapist weaning protocols / Lecture
 Patient ventilator synchrony during mechanical ventilation / Lecture
 Toronto Critical Care Medicine Symposium, Toronto, Ontario
- 2000 Pressure vs. volume ventilation / Lecture
 Ventilation of the patient with obstructive lung disease / Lecture
 Weaning from mechanical ventilation / Lecture
 Noninvasive positive pressure ventilation / Lecture
 Aerosol delivery techniques / Lecture
 Fourth Pulmonary Medicine Update, Cairo, Egypt
- 2000 Positive pressure ventilation for the patient with obstructive lung disease / Lecture
 Weaning from mechanical ventilation / Lecture
 Noninvasive positive pressure ventilation / Workshop
 American College of Chest Physicians Mechanical Ventilation Course,
 Buenos Aires, Argentina
- 2000 Monitoring pulmonary mechanics during mechanical ventilation / Lecture
 Inhaled nitric oxide / Lecture
 Weaning from mechanical ventilation / Lecture
 Use of filters in the ICU / Lecture
 Hospital Sírío-Libanês, São Paulo, Brazil.
- 2000 Monitoring pulmonary gas exchange / Lecture
 Equipment for noninvasive ventilation / Lecture
 Pressure support ventilation - a simple mode? / Lecture
 American Thoracic Society, Toronto, Ontario, Canada
- 2000 Humidification and aerosols during mechanical ventilation / Lecture
 Proportional assist ventilation / Lecture
 Congress of the Asia Pacific Association for Respiratory Care, Seoul, Korea
- 2001 Evidence-based secretion clearance / Lecture
 Respiratory Care Journal Conference, Banff, Alberta, Canada
- 2001 Physiology of the artificial airway / Lecture
 Noninvasive positive pressure ventilation / Lecture
 Argentina Society for Respiratory Physical Therapy/Argentina Society for Critical Care
 Medicine, Buenos Aires, Argentina
- 2001 Ventilator circuits / Lecture
 Humidification / Lecture
 Aerosol drug delivery / Lecture
 Inhaled Nitric Oxide and Heliox / Lecture
 New modes of mechanical ventilation / Lecture
 Mechanical Ventilation Conference, Mexico City, Mexico
- 2001 Recruitment maneuvers / Lecture

- Respiratory Care journal conference, Cancun, Mexico
- 2002 Indications for monitoring the critically ill patient / Lecture
International Conference on Heart-Lung Interactions, Turin, Italy
- 2002 Ventilator circuits and ventilator-associated pneumonia / Lecture
Noninvasive pressure support ventilation / Lecture
Aerosol delivery during mechanical ventilation / Lecture
SMART, Milan, Italy
- 2002 Noninvasive positive pressure ventilation / Workshop
Ventilator modes during weaning from mechanical ventilation / Lecture
Prevention of ventilator-associated pneumonia / Lecture
Recruitment maneuvers / Lecture
13th Congreso Argentino de Terapia Intensiva, Buenos Aires, Argentina
- 2003 Lung recruitment maneuvers / Lecture
Noninvasive positive pressure ventilation / Lecture
Monitoring lung mechanics during mechanical ventilation / Lecture
New modes and features of mechanical ventilators / Panel
India Society for Critical Care Medicine, Jaipur, India
- 2003 Anatomy of the ventilator / Lecture
Ventilation of the patient with obstructive lung disease / Lecture
Monitoring pulmonary mechanics in the mechanically ventilated patient / Lecture
Ventilator modes / Lecture
Noninvasive positive pressure ventilation / Lecture
Respiratory Care Update, Cairo, Egypt
- 2003 Information retrieval / Lecture
Respiratory Care Journal Conference, Banff, Alberta
- 2003 Weaning from mechanical ventilation – what has the evidence taught us? / Lecture
Aerosol delivery during mechanical ventilation / Lecture
Is pressure support ventilation a simple mode? / Lecture
Monitoring during mechanical ventilation / Lecture
The role of the ventilator circuit in the development of nosocomial pneumonia / Lecture
Tips to improve the success of noninvasive ventilation / Lecture
10th Intensive Care Congress of Southern Brazil, Gramado, Brazil
- 2004 Monitoring during mechanical ventilation / Lecture
The evidence base for noninvasive positive pressure ventilation / Lecture
Recruitment maneuvers – As useful as hoped? / Lecture
Weaning from mechanical ventilation – what has the evidence taught us? / Lecture
Is pressure support a simple mode? / Lecture
VIII International Symposium on the Treatment of the Critically Ill Patient, Hospital Sírio-
Libanês, São Paulo, Brazil.

- 2004 Pressure support ventilation / Lecture
Respiratory Care Journal Conference, Cancun, Mexico
- 2005 Role of positioning on ventilator-associated pneumonia / Lecture
Noninvasive positive pressure ventilation and ventilator-associated pneumonia / Lecture
Respiratory Care Journal Conference, Cancun, Mexico
- 2005 Conference summary; Metered dose inhalers and dry powder inhalers / Lecture
Respiratory Care Journal Conference, Los Cabos, MX
- 2005 Weaning from mechanical ventilation / Lecture
Selection of an aerosol delivery device / Lecture
Canadian Society of Respiratory Therapists, Edmonton, Alberta, CA
- 2005 The evidence for noninvasive ventilation / Lecture
The interface for noninvasive ventilation / Lecture
The ventilator for noninvasive ventilation / Lecture
Monitoring during noninvasive Ventilation / Lecture
Proportional assist ventilation / Lecture
Physiologic effects of PEEP / Lecture
Pulmonary graphics in the patient with acute lung injury / Lecture
Noninvasive Mechanical Ventilation and Pulmonary Mechanics, Chilean Society of Critical Care, Division of Kinesiology, Santiago, Chile
- 2005 An evidence-based approach to weaning from mechanical ventilation / Lecture
Prevention of ventilator-associated pneumonia / Lecture
Mechanical ventilation of the patient with asthma / Lecture
International Symposium on Mechanical Ventilation, São Paulo, Brazil
- 2005 Mechanical ventilation of the patient with multiple trauma / Lecture
New modes of mechanical ventilation / Lecture
XVIII Pan-American Trauma Society, Guayaquil, Ecuador
- 2005 Noninvasive positive pressure ventilation / Lecture
Luis Vernaza Hospital, Guayaquil, Ecuador
- 2006 Equipment for noninvasive ventilation / Lecture
Respiratory Care Journal Conference, Ixtapa, Mexico
- 2006 Monitoring during mechanical ventilation / Lecture
7th International Congress on Pediatric Pulmonology (CIPP), Montreal, Canada
- 2006 Respiratory muscle training and weaning from mechanical ventilation / Lecture
Advances in mechanical ventilation – First Do No Harm / Lecture
13th International Symposium for Respiratory Physiotherapy in the Intensive Care Unit, Curitiba, Brazil

- 2006 Noninvasive positive pressure ventilation should be used for all forms of respiratory failure / Lecture
High frequency ventilation should not be used in adults with ARDS / Lecture
Respiratory Care Journal Conference, Banff, Alberta, Canada
- 2006 Inhaled nitric oxide / Lecture
Evaluation of mechanics in patients receiving mechanical ventilation / Lecture
Alberta Respiratory Therapy Association, Calgary, Alberta, Canada
- 2006 Patient-ventilator synchrony during noninvasive ventilation / Lecture
Assessment of respiratory mechanics in the mechanically ventilated patient / Lecture
Respiratory muscle fatigue / Lecture
Introduction to HFOV / Lecture
VII Intensive Kinesiology and 24th Chilean Intensive Medicine Congress, La Serena, Chile
- 2006 Tracheal gas insufflation and aerosol delivery during mechanical ventilation / Lecture
Noninvasive positive pressure ventilation – an evidence-based review / Lecture
Advances in mechanical ventilation – first do no harm / Lecture
11th Asian Pacific Society of Respirology Conference, Kyoto, Japan
- 2007 Ventilator modes, old and new / Lecture
Monitoring respiratory mechanics / Lecture
Strategies for mechanical ventilation of patients with obstructive lung disease / Lecture
Prevention of ventilator-associated pneumonia / Lecture
Noninvasive positive pressure ventilation / Lecture
University of Cairo. 7th Pulmonary Medicine Update, Cairo, Egypt
- 2007 Conference summary / Lecture
Respiratory Care Journal Conference on airway clearance techniques, Cancun, Mexico
- 2007 What is evidence-based respiratory care and why should I care? / Lecture
Advances in mechanical ventilation: first do no harm / Lecture
Canadian Society for Respiratory Therapy, Montreal, Quebec, Canada
- 2007 Aerosol delivery during noninvasive ventilation / Lecture
16th Congress of the International Society for Aerosols in Medicine, Tours, France
- 2007 Techniques for NIV in acute care / Lecture
Noninvasive and Home Mechanical Ventilation: ICU and beyond 2007, American College of Chest Physicians, Montreal, Quebec, Canada
- 2007 Graphics monitoring – a look into the lungs / Lecture
VILI – new insights in pathology, implications in treatment / Lecture
Identification, quantification, and management of auto PEEP / Lecture
Mechanical Ventilation 2007 Basics and Beyond, K. R. Hospital, Bangalore, India
- 2007 Aerosol delivery during mechanical ventilation / Lecture
Clinical applications of capnography / Lecture

XIII Annual International Symposium on Adult Mechanical Ventilation, Sao Paulo, Brazil

- 2007 Anatomy of the ventilator / Lecture
Noninvasive positive pressure ventilation / Lecture
Dongsan Medical Center, Daegu, Korea
- 2008 A survey of the use of noninvasive ventilation in academic emergency departments / Podium abstract presentation
American Thoracic Society, Toronto, ON
- 2008 Patient-ventilator dys-synchrony / Lecture
Use of noninvasive ventilation in the Emergency Department / Lecture
XIV International Symposium on Mechanical Ventilation, São Paulo, Brazil
- 2008 Lung protective strategies for acute respiratory failure / Lecture
Noninvasive ventilation workshop / Lecture
What is evidence-based respiratory care? / Lecture
Respiratory care of the patient with neuromuscular disease / Lecture
Advances in mechanical ventilation – First do no harm / Lecture
Aerosol delivery during mechanical ventilation / Lecture
The 1st International Respiratory Therapy Conference, Tawam Hospital, Abu Dhabi, United Arab Emirates
- 2009 Inhaled vasodilator therapy / Lecture
Respiratory Care Journal Conference, Cancun, Mexico
- 2009 Dealing with tracheostomy in adults / Lecture
Aerosol therapy during mechanical ventilation / Lecture
12th International Conference on Home Mechanical Ventilation, Barcelona, Spain
- 2009 Weaning protocols / Lecture
3rd European Respiratory Care Association Congress, Stresa, Italy
- 2009 State of the art of mechanical ventilation / Lecture
New ventilator modes / Lecture
Aerosol delivery during mechanical ventilation / Lecture
Patient-ventilator synchrony / Lecture
Jornadas Intensivo Clinica Alemana, Santiago, Chile
- 2009 Weaning from mechanical ventilation – a practical approach / Lecture
Meet the professor – Weaning from mechanical ventilation / Lecture
Inhaled drugs during mechanical ventilation / Lecture
Critical Care Canada Forum, Toronto, ON, Canada
- 2010 Anatomy of the ventilator / Lecture
New ventilator modes / Lecture
Mechanical ventilation of the patient with neuromuscular disease / Lecture

- Noninvasive ventilation 2010 update / Lecture
 The 5 best papers in Respiratory Care 2009 / Lecture
 University of Cairo 10th Pulmonary Medicine Update, Cairo, Egypt
- 2010 Patient-ventilator interactions during noninvasive ventilation / Lecture
 Respiratory Care Journal Conference, Cancun, Mexico
- 2010 Mechanical ventilation of the patient with ARDS / Lecture
 Management of refractory hypoxemic respiratory failure / Lecture
 Basic ventilator modes / Workshop
 Ventilator graphics / Workshop
 American College of Physicians, Toronto, ON, Canada
- 2010 New ventilator modes / Lecture
 When to use PEEP / Lecture
 Noninvasive ventilation for neuromuscular disease / Lecture
 Aerosol delivery during noninvasive ventilation / Lecture
 Second National Symposium on Respiratory Therapy, Santiago, Chile
- 2010 The role of noninvasive ventilation in long term respiratory care / Lecture
 Respiratory protocols during a pandemic / Lecture
 Recruitment maneuvers should be routinely attempted in all ARDS patients: Con / Debate
 Asia Ventilation Forum, Kaohsiung, Taiwan
- 2010 Ventilator-induced lung injury / Critical Care Grand Rounds
 Chang Gung University, Tao-Yuan, Taiwan
- 2010 Noninvasive ventilation in acute respiratory failure / Lecture
 Patient-ventilator interaction during volume-control ventilation / Lecture
 Ventilator-associated pneumonia / Lecture
 Noninvasive ventilation / Workshop
 Hospital de Rehabilitación Respiratoria María Ferrer, Buenos Aires, Argentina
- 2010 When should NIV be initiated for patients with stable COPD? / Lecture
 Showa University, Tokyo, Japan
- 2010 How to initiate a noninvasive ventilation program: bringing evidence to the bedside /
 Lecture
 Acute NPPV Congress, Sapporo, Japan
- 2011 Devices for asthma management / Lecture
 Mechanical ventilation of the patient with asthma / Lecture
 Noninvasive ventilation update / Lecture
 Weaning the long-term mechanically ventilated patient / Lecture
 Study Design: Clinical trials and meta-analysis / Lecture
 Gulf Thoracic Congress, Dubai, UAE
- 2011 Respiratory muscle training during mechanical ventilation / Lecture

- Should every mechanically ventilated patient receive PEEP? / Lecture
 Assessment of respiratory mechanics and graphics in the mechanically ventilated patient with ARDS / Lecture
 Use of HFOV in patients receiving mechanical ventilation / Debate
 XI Congress of the Peruvian Society of Intensive Care Medicine, Lima, Peru
- 2011 Noninvasive ventilation for acute respiratory failure / Lecture
 Noninvasive ventilation in the home / Lecture
 Evidence-based respiratory care / Lecture
 How to write a scientific paper / Lecture
 Ho Chi Minh City Respiratory Society, Ho Chi Minh City, Vietnam
- 2011 Noninvasive ventilation for acute respiratory failure / Lecture
 Noninvasive ventilation in the home / Lecture
 Evidence-based respiratory care / Lecture
 How to write a scientific paper / Lecture
 Bach Mai Hospital, Hanoi, Vietnam
- 2011 Aerosol delivery techniques / Lecture
 Mechanical ventilation of the patient with ARDS / Lecture
 Noninvasive ventilation for acute respiratory failure / Lecture
 Universidad del Desarrollo, Concepción, Chile
- 2011 Noninvasive ventilation. The approach in the United States / Lecture
 The Netherlands. European Respiratory Society, Amsterdam
- 2012 COPD assessment / Lecture
 Long term oxygen therapy / Lecture
 Mechanical ventilation of the patient with obstructive lung disease / Lecture
 Noninvasive ventilation / Lecture
 Asthma/COPD Educator Course & Aerosol Delivery Workshop in collaboration with Gulf Thoracic Society and Saudi Thoracic Society, Riyadh, Saudi Arabia
- 2012 Waveforms and respiratory mechanics during mechanical ventilation / Lecture
 Patient-ventilator synchrony / Lecture
 Use of spontaneous breathing trials / Lecture
 Patient-ventilator interaction / Lecture
 XVI International Conference of respiratory physiotherapy in the ICU, Rio de Janeiro, Brazil
- 2012 Mechanical ventilation – first do no harm / Lecture
 Canadian Society of Respiratory Therapists, Vancouver, CA
- 2012 Mechanical ventilation – first do no harm / Lecture
 Noninvasive ventilation / Lecture
 Patient-ventilator synchrony / Lecture
 Liberation from mechanical ventilation / Lecture
 VII International Course in Critical Care, Quito, Ecuador

- 2012 COPD assessment / Lecture
 Mechanical ventilation for the patient with obstructive lung disease / Lecture
 Noninvasive ventilation / Lecture
 Oxygen therapy for the patient with COPD / Lecture
 Aerosol delivery devices / Lecture
 Mechanical ventilation – first do no harm / Lecture
 Gulf Thoracic Society, Dubai, UAE
- 2012 Facilitating speech in the patient with a tracheostomy / Advisory Committee
 13th International Conference On Home Mechanical Ventilation, Barcelona, Spain
- 2012 Anatomy of the ventilator / Lecture
 Respiratory mechanics during mechanical ventilation / Lecture
 Lung protective ventilation / Lecture
 Mechanical ventilation of the patient with obstructive lung disease / Lecture
 Noninvasive ventilation / Lecture
 Liberation from mechanical ventilation / Lecture
 Hospital De Especialidades Eugenio Espejo, Quito, Ecuador
- 2013 Role on noninvasive ventilation in the ventilator discontinuation process / Lecture
 How to select the best PEEP / Lecture
 Patient-ventilator synchrony / Lecture
 2nd Latin American Congress of Respiratory Therapy, Santiago, Chile
- 2013 Can an ARDS patient be ventilated awake? / Lecture
 Weaning and heart failure, The role of NIV in weaning / Lecture
 5 things I learned about mechanical ventilation in the past 40 years / Lecture
 3rd International Symposium on Critical Pulmonary and Advanced Respiratory Care,
 organized by the Hospital Italiano de Buenos Aires, Buenos Aires, Argentina
- 2013 Outcome measures in airway clearance / Lecture
 Do protocols of weaning make a difference / Lecture
 Optimizing aerosol therapy: body positioning and ventilatory pattern / Lecture
 Bedside assessment: when the problem is the ventilator set-up / Lecture
 ARIR 2013, Genova, Italy
- 2013 Monitoring respiratory mechanics during mechanical ventilation / Lecture
 Liberation for mechanical ventilation / Lecture
 Noninvasive ventilation – 2013 update / Lecture
 XVI International Mechanical Ventilation Conference, Mexico City, Mexico
- 2014 Patient-ventilator interaction / Lecture
 Lung-protective ventilation strategies / Lecture
 The ventilator liberation process / Lecture
 VII International Congress of Cardiorespiratory Care in Costa Rica
 San José, Costa Rica

- 2014 Lung-protective ventilation / Lecture
Monitoring lung mechanics /Lecture
Liberation for mechanical ventilation / Lecture
XVII International Mechanical Ventilation Conference, Mexico City, Mexico
- 2014 What is evidence-based medicine? /Lecture
What is the role of advanced ventilator modes? /Lecture
Mechanical Ventilation of the Patient with Obstructive Lung Disease / Lecture
Patient-ventilator asynchrony / Lecture
PEEP selection in the patient with ARDS / Lecture
Noninvasive Ventilation / Workshop
2nd International Respiratory Therapy Conference
Tawam Hospital, Al Ain, United Arab Emirates
- 2015 How to set up a ventilator: standard versus high pressure / Lecture
Tracheostomy tubes / Lecture
14th JIVD International Conference on Home Mechanical Ventilation, Lyon, France
- 2015 Evidence-based mechanical ventilation / Lecture
Newer modes of mechanical ventilation = better outcomes? / Lecture
Patient-ventilator asynchrony during lung protective ventilation / Lecture
Current strategies for severely impaired gas exchange / Lecture
XIII Congreso Internacional Sopemi 2015, Lima, Peru
- 2016 Anatomy of the Ventilator / Lecture
How to Set the Ventilator / Lecture
ATS Global Scholars Program
- 2016 Airway clearance techniques in chronic obstructive pulmonary disease / Lecture
New modalities for noninvasive ventilation / Lecture
We love air heated and humidified / Lecture
3rd International Conference on Respiratory Physiotherapy, Rimini, Italy
- 2016 The ventilator liberation process / Lecture
Noninvasive respiratory support: HFNC, CPAP, NIV / Lecture
Mechanical ventilation of the patient with obstructive lung disease / Lecture
Setting PEEP for acute respiratory failure / Lecture
Sociedad Chilena de Medicina Intensiva, Santiago, Chile
- 2016 Respiratory mechanics in the mechanically ventilated patient: Beyond pressure and flow measures /Lecture
HFNC versus CPAP in the newborn / Lecture
13th European Conference on Pediatric and Neonatal Mechanical Ventilation
Montreux, Switzerland
- 2017 Anatomy of the Ventilator / Lecture
How to Set the Ventilator / Lecture
ATS Global Scholars Program

- 2017 Noninvasive ventilation: What is the evidence? / Lecture
 High flow nasal cannula: What is the evidence? / Lecture
 Liberation for mechanical ventilation: It's not weaning anymore / Lecture
 Clinical case roundtable / Panel Discussion
 XX International Mechanical Ventilation Conference
 Mexico City, Mexico
- 2017 Update on ARDS and mechanical ventilation / Lecture
 You want to get published in Respiratory Care? / Lecture
 11th Intercoastal Respiratory Therapy and Critical Care Assembly
 Xi'an City, China
- 2017 Mechanical Ventilation – An evidence-based approach / Lecture
 Effectiveness of high flow nasal cannula in adults with respiratory failure / Lecture
 Treatment of post-extubation respiratory failure / Lecture
 3rd International Congress of SAKiCaRe
 Buenos Aires, Argentina
- 2018 Aerosol delivery during mechanical ventilation / lecture
 Inhaled gases during mechanical ventilation / lecture
 Trigger, cycle, and patient-ventilator interaction / lecture
 XXI International Forum of Critical Care Medicine
 Mexico City, Mexico
- 2019 When Less is More / Lecture
 Taiwan Society for Respiratory Therapy
 Taipei City, Taiwan
- 2019 When Less is More / Lecture
 How to publish a paper in SCI Journal / Lecture
 Wuhan Wuchang Hospital
 Wuhan, China
- 2019 Patient-ventilator dyssynchrony / Lecture
 Aerosol delivery - Non-invasive ventilation and high-flow nasal oxygen / Lecture
 Gas administration: when and how – Mechanical ventilation in non-ARDS patients /
 Lecture
 How I manage a patient with acute respiratory patient with acute respiratory failure / Panel
 Choosing the optimal ventilatory conditions / Lecture
 The different modes - Assisted breathing / Lecture
 39th International Symposium on Intensive Care and Emergency Medicine
 Brussels, Belgium
- 2019 Spontaneous Ventilator Modes / Lecture
 The Ventilator Circuit – invasive ventilation / Lecture
 The Ventilator Circuit – noninvasive ventilation / Lecture
 XXII International Mechanical Ventilation Conference

Mexico City, Mexico

- 2019 Noninvasive Respiratory Support / Lecture
Liberation from Mechanical Ventilation / Lecture
Tracheostomy Tubes / Lecture
Norwegian Annual autumn meeting for long-term mechanical ventilation
Bergen, Norway
- 2020 Noninvasive Respiratory Support in the COVID-19 Era / Virtual Lecture
International Mechanical Ventilation Conference
Mexico City, Mexico
- 2020 NIV vs HFNC for Hypercapnic COPD Exacerbation and Hypoxemic Respiratory Failure
Mistakes by New Authors / Virtual Lecture
Taiwan Society for Respiratory Therapy 3rd International Congress

Report of Clinical Activities and Innovations

Current Licensure and Certification

- 1976-present Registered Respiratory Therapist (NBRC)
- 1991-present Neonatal/Pediatric Respiratory Care Specialist (NBRC)
- 1992-present Respiratory Care License, Commonwealth of Massachusetts

Practice Activities

- | | | | | |
|-----------|---------------------------------|-----------------------------------|--|-----------|
| 1992-2016 | Respiratory Care | Massachusetts
General Hospital | Oversee respiratory care activities, primarily in the medical ICU and Neurosciences ICU | 6-12 h/wk |
| 2000-2016 | Multidisciplinary
ALS Clinic | Massachusetts
General Hospital | Provide support for respiratory care (noninvasive ventilation, invasive ventilation, airway clearance) | 2-4 h/wk |

Report of Technological and Other Scientific Innovations

- | | |
|--|---|
| Nasal delivery system for inhaled nitric oxide
1999 | United States Patent #6,142,147
This innovation has contributed to the clinical use of inhaled nitric oxide in spontaneously breathing patients. |
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Recognition

2011	Distinguished Alumni Wall of Honor Inductee	Penn Manor High School	Lifetime alumnus achievement award
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Report of Scholarship

Research investigations

1. **Hess D**, Lind L. Nomograms for the application of the Bourns BP200 as a volume constant ventilator. *Respir Care* 1980;26:248-50.
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16. **Hess D**, Good C, Didyoung R, Agarwal N, Rexrode WO. The validity of assessing arterial blood gases 10 minutes after an FIO₂ change in mechanically ventilated patients without chronic pulmonary disease. *Respir Care* 1985; 30:1037-41.
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