# CURRICULUM VITAE **MARTIN KESZLER, M.D.**

Women and Infants Hospital of Rhode Island Department of Pediatrics 101 Dudley Street Providence, RI, 02905-2499 mkeszler@WIHRI.org (401) 274-1122, x7490 (401) 453-7571 (fax)

#### **EDUCATION**

Undergraduate	McGill University, Montreal, Canada	
	Sciences and Humanities (2 years)	1971-
	(Diploma of Collegiate Studies)	1972 University Scholarship x 2
	Pre-Med Science accelerated program	1973 University Scholarship
Medical School	McGill University, Montreal, Canada M.D.C.M. Degree (Doctor of Medicine, Master of	1973-1977 Surgery) 1977

#### POSTGRADUATE TRAINING

Residency	St. Mary's Hospital Montreal, Canada, PGY 1 Flexible Internship	1977 – 1978
	Children's Hospital Medical Center of Akron, OH PGY 2 & 3 Residency in Pediatrics	1978 - 1980
Fellowship	Children's Hospital Medical Center of Akron, OH PGY 4 &5 Neonatal-Perinatal Medicine	1980 - 1982
POSTGRADUATE HONORS AND AWARDS		
1981	Special Prize for scientific paper presentation Children's Hospital Medical Center of Akron, OH	

- 1982 First Prize for scientific paper presentation Children's Hospital Medical Center of Akron, OH
- 1982 Special Teaching Award by house staff Children's Hospital Medical Center of Akron, Akron, OH
- 1986 Young Investigator Award, Section of Perinatal Pediatrics American Academy of Pediatrics

- 2000 Honorary Member, Czech Perinatal Society in recognition of 10 years of educational efforts in my country of origin
- 2008 Sponsor and Nominator, Monisha Bahri, MD, Recipient: Fellow Clinical Research Award, Pediatric Academic Societies Meeting, May 2008 (abstract, "A Randomized Controlled Trial to Determine the Lowest Effective Dose for Adequate Mydriasis in Preterm Infants" 4452.13
- 2009 Elected Member, American Pediatric Society
- 2013 Awarded Honorary Master of Arts ad eundem degree by Brown University

#### MILITARY SERVICE No military service obligation in Canada

#### PROFESSIONAL LICENSES AND BOARD CERTIFICATION

Licensure:	<ul> <li>1978 Medical Council of Canada (LMCC)</li> <li>1980 Ohio -inactive</li> <li>1982 Virginia (#0101034221) - inactive</li> <li>1982 District of Columbia (#13375) - inactive</li> <li>2010- Rhode Island (#13425) - active</li> </ul>	
Board Certification:	<ul> <li>Diplomate, National Board of Medical Examiners July 1, 1978 (#186265)</li> <li>Diplomate, American Board of Pediatrics November 18, 1983 (# 29602)</li> <li>Sub-Board of Neonatal-Perinatal Medicine, October 18, 1985 (#1465)</li> <li>AAP Neonatal Resuscitation Program Hospital Trainer 1994, exp 08/14</li> </ul>	

#### ACADEMIC APPOINTMENTS

Georgetown University Washington, D.C.	1982-1983 1983-1985 1985-1991 1991-1998 1998-2010	Clinical Instructor of Pediatrics Instructor of Pediatrics Assistant Professor of Pediatrics Associate Professor of Pediatrics Professor of Pediatrics
The Warren Alpert School of Medicine, Brown University Providence, RI	2010-	Professor of Pediatrics Research Scholar Track

# HOSPITAL APPOINTMENTS

Georgetown University Washington, D.C.	1984–2010 1991-2010 1991-1998 1992-1993 1993-1999 1999–2010 1999–2010	Director of Extracorporeal Membrane Oxygenation Program Director, Neonatal Information System Co-Director, Neonatal Pulmonary Function Lab Co-Director, Neonatal-Perinatal Medicine Fellowship Program Director, Neonatal-Perinatal Medicine Fellowship Program Director of Nurseries/Inborn Neonatal Services Medical Director, Neonatal Respiratory Therapy Services
Women and Infants Hospital of Rhode Island	-	Associate Director of NICU Director of Respiratory Care Services
OTHER APPOINTMENTS	1990-	DC Utilization Review Consortium, Subcommittee: Resident Physician Quality of Care Issues
	1993-present	Member, Medical Advisory Board, Bunnell Inc.
	1994-present	Consultant, Draeger Inc.
	1994-2000	Consultant, Anesthesiology & Respiratory Therapy Panel of FDA Office of Device Evaluation
	1996-2001	Member, NIH Study Section: Multidisciplinary Sciences Special Emphasis Panel
	1997-1999	Consultant, Center for Drug Evaluation & Research of the FDA
	1999-2004	Mayor's Advisory Committee on Metabolic Screening, Washington, DC
	2002-present	Head, Respiratory Branch of IPOKRaTES International
	2003-2004	Member, NIH Special Emphasis Panel, Center for Evaluation of Risks to Human Reproduction, Fluoxetine Expert Panel
	2005-present	Editorial Board Member, American Journal of Perinatology
	2005-present	Scientific Advisory Board, Discovery Labs
	2006-2010	Member, Maternal-Fetal Medicine Units Network Scientific Advisory Board
	2007-2010	Ad-hoc Scientific Reviewer, NICHD Neonatal Research Network
	2008-2010	Member, NICHD Neonatal Research Network Data Safety Monitoring Board
	2008-present	Editorial Board Member, Journal of Perinatology

2009-2010	Vice-Chair, NICHD Neonatal Research Network
	Data Safety Monitoring Board
2010-present	Associate Editor, American Journal of Perinatology
2010-present	Member, Board of Directors, IPOKRaTES
-	Foundation
2011-present	International Editor, Journal of Clinical Neonatology
2011	Section Editor, Neonatology, Textbook of Clinical
	Pediatrics, Abdelaziz Elzouki, Ed, Springer-Verlag,
	Berlin.

# HOSPITAL COMMITTEES

Georgetown University Hospital	1982-1992 1982 – 2007	Member, Hospital Committee on Quality Assurance Member, Administrative Committee, Nursery Complex
	1983-1996	Chair, Pediatrics Quality Assurance Committee
	1983–1991	Chair, Multi-disciplinary Committee on Quality Assurance, NICU/Nursery Complex
	1986-1992	Co-Chair, Hospital Committee on Quality Assurance
	1986-1989	Chair, Transport Committee, Nursery Complex
	1993-1996	Member, Steering Committee, Developmental Psychobiology Research Initiative
	1993-1996	Chair, Initial Review Group, Developmental Psychobiology Research Initiative
	1999-2010	Member, Multidisciplinary ICU Committee
	1999–2010	Co-Chair, Multi-disciplinary Committee on Quality Assurance, NICU/Nursery Complex
	2000-2005	Member, NICU Multidisciplinary Pain Task Force
	2001-2006	Member, End-of-life Care Task Force
	2003-2010	Member, Inpatient Obstetrical Practices Committee
	2007-2010	Chair, Administrative Committee, Nursery Complex
Women and Infants Hospital	2010-present	Infant Code Committee
		Transport Committee
	-	Research Oversight Committee
	2011-present	Pharmacy and Therapeutics Committee

# UNIVERSITY COMMITTEES

Georgetown University	1988-2010	Faculty Advisor
Hospital	2000-2002	Alternate, Institutional Review Board
	2002-2008	Member, Institutional Review Board
	2003-2009	Member, Research Committee, Dept. of Pediatrics
	2003-2005	Alternate, Oncology Institutional Review Board
	2008-2010	Chair Committee B, Institutional Review Board

### EDITORIAL BOARD MEMBERSHIPS

American Journal of Perinatology (Associate Editor) Journal of Perinatology Journal of Clinical Neonatology (International Editor) Research and Reports in Neonatology Frontiers in Neonatology

#### PEER REVIEW ACTIVITIES

Acta Paediatrica American Journal of Perinatology American Journal of Respiratory and Critical Care Medicine Archives of Disease in Childhood – Fetal/Neonatal Edition Archives of Pediatrics and Adolescent Medicine Artificial Organs **ASAIO** Journal Critical Care Medicine Encyclopedia of Medical Devices and Instrumentation European Journal of Pediatrics Intensive Care Medicine Journal of Healthcare Engineering Journal of Neonatal-Perinatal Medicine Journal of Pediatrics Journal of Perinatology March of Dimes Neonatology (formerly Biology of the Neonate) Pediatric Academic Societies, Abstract review: Neonatal Pulmonary Section (2004, 2005, 2006, 2008, 2010) Pediatric Academic Societies Abstract review, Neonatal Clinical Research Section (2009) Pediatric Critical Care Medicine Pediatric Health Pediatric Infectious Disease Journal Pediatric Pulmonology **Pediatric Research Pediatrics** Pediatrics and Neonatology **Respiratory** Care Thrasher Research Fund Overseas Examiner-PhD Thesis, Melbourne School of Graduate Research, University of Melbourne, Victoria, Australia, 2008 Overseas Examiner-PhD Thesis, University of Western Australia, Crawley, Western Australia 2011 Oversees Examiner-PhD Thesis, Monash University, Melbourne, Victoria, Australia, 2012

#### **MEMBERSHIP IN SOCIETIES:**

Member, American Pediatric Society Member, Society for Pediatric Research

Member, Eastern Society for Pediatric Research

Fellow, American Academy of Pediatrics

Member, AAP Section of Perinatal Pediatrics

Charter Member of Steering Committee, Extracorporeal Life Support Organization Member, Steering Committee, Extracorporeal Life Support Organization (1989-1993) Member, Protocols Committee, Extracorporeal Life Support Organization (1989-2006) Member, American Association for Respiratory Care

#### PUBLICATIONS LIST

### ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

- 1. <u>Keszler M</u>, Klein R, McClellan L, et al: Effects Of Conventional And High-Frequency Ventilation On Lung Parenchyma. Crit Care Med. 1982;10:514-516.
- 2. <u>Keszler M</u>, Siva Subramanian KN: Pseudohypoaldosteronism: Fulminant Presentation in a Premature Infant. Am J Dis Child. 1983;137:738-740.
- 3. <u>Keszler M</u>, Molina B, Siva Subramanian KN: Combined High-Frequency Jet Ventilation in a Meconium Aspiration Model. Crit Care Med. 1986;14:34-38.
- 4. <u>Keszler M</u>, Klappenbach RS, Reardon E: Lung Pathology After High-Frequency Jet Ventilation Combined With Slow Intermittent Mandatory Ventilation in a Canine Model of Meconium Aspiration. Pediatr Pulmonol. 1988;4:144-149.
- Moront MG, <u>Keszler M</u>, Cox CB, Milewski M, Visner MS: The Effect Of Variable Preload On Left Ventricular Function In A Single Cannula System For Extracorporeal Membrane Oxygenation. Surgical Forum. 1988;38:291-293.
- <u>Keszler M</u>, Siva Subramanian KN, Smith YA, Dhanireddy R, Mehta N, Molina B, Cox CB, Moront MG: Pulmonary Management During Extracorporeal Membrane Oxygenation. Crit Care Med. 1989;17:495-500.
- 7. Zito L, <u>Keszler M</u>: Massive Edema and Bilateral Pleural Effusions in a Newborn Infant. Clinical Allergy Immunology rounds. Ann Allergy. 1989;63:277-280.
- Moront MG, Katz N, <u>Keszler M</u>, Visner MS, Hoy G, O'Connell J, Cox CB, Wallace RB: Extracorporeal Membrane Oxygenation for Neonatal Respiratory Failure: A Report of 50 Cases. J Thor Cardiovasc Surg. 1989;97:706-714.
- 9. <u>Keszler M</u>, Donn S, Buciarelli R, Alverson DC, Hart M, Lunyong V, Modanlou HD, Noguchi A, Pearlman SA, Puri A, et al: Multi-Center Controlled Trial Comparing High-Frequency Jet Ventilation And Conventional Ventilation In Newborn Infants With Pulmonary Interstitial Emphysema. J Pediatr. 1991;119:85-93.
- <u>Keszler M</u>, Ryckman FC, McDonald JV, Jr., Sweet LD, Moront MG, Boegli MJ, Cox CB, Leftridge, CA: A Prospective Multi-Center Randomized Study of High Vs. Low Positive End-Expiratory Pressure During Extracorporeal Membrane Oxygenation. J Pediatr. 1992;120:107-113.
- 11. <u>Keszler M</u>, Schumacher Carbone MT, Cox C: Severe Respiratory Failure After Elective Repeat Cesarean Delivery: Potentially Preventable Condition Leading to ECMO. Pediatr 89:670-672, 1992.
- 12. Goldberg L, Marmon L, <u>Keszler M</u>: High-frequency Jet Ventilation Decreases Flow Through Tracheo-Esophageal Fistula. Crit Care Med. 1992;20:547-550.

- 13. Horan JJ, Dejter SW, <u>Keszler M</u>, Gibbons MD: Extracorporeal Membrane Oxygenation: An Adjunct in the Management of the High-Risk Infant With Pulmonary Hypoplasia and Congenital Anomalies of the Urinary Tract. J Urology. 1993;150:434-437.
- 14. Kiernan SC, Pinckert TL, <u>Keszler M</u>: Ultrasound Guidance of Suprapubic Bladder Aspiration in Neonates. J Pediatr. 1993;123:789-791.
- Walsh-Sukys MC, Cornell DJ, Houston LN, <u>Keszler M</u>, Kanto WP, Jr.: Treatment of Persistent Pulmonary Hypertension of the Newborn Without Hyperventilation: An Assessment of Diffusion of Innovation. Pediatrics. 1994;94:303-306.
- <u>Keszler M</u>, Moront MG, Visner MS, Cox C, Milewski M: Oxygen Delivery with a Single Canula Tidal Flow Veno-Venous System for Extracorporeal Membrane Oxygenation. ASAIO Journal. 1995;41:850-854.
- <u>Keszler M</u>, Modanlou HD, Brudno DS, Clark FI, Cohen RS, Ryan RM, Kaneta MK, Davis JM: Multi-Center Controlled Clinical Trial Of High-Frequency Jet Ventilation In Preterm Infants With Uncomplicated Respiratory Distress Syndrome. Pediatrics. 100:593-599,1997.
- 18. Prabhu V, <u>Keszler M</u>, Dhanireddy R: Effects of Nebulized Versus Intravenous Furosemide on Pulmonary Function in Infants with Bronchopulmonary Dysplasia. Arch Dis Child 1997;77F:32-35.
- 19. Ringer SA, Richardson DK, Sacher RA, <u>Keszler M</u>, Churchill WH: Variations in Transfusion Practice in Neonatal Intensive Care. Pediatrics. 1998;101:194-200.
- 20. Prabhu V, <u>Keszler M</u>, Dhanireddy R: Dose-dependent Evaluation of the Effects of Nebulized Furosemide on Pulmonary Function In Ventilated Preterm Infants. J Perinatology.1998;18:357-60.
- Holliday MA, Pinckert T, Kiernan SC, Kunos, I, Angelus P and <u>Keszler M</u>: Dorsal Penile Block Versus Placebo for Circumcision in Low Birth Weight Neonates. Archives of Pediatrics and Adolescent Medicine 1999;153:476-480.
- 22. Clark RH, Kueser TJ, Walker MW, Southgate WM, Huckaby JL, Perez JA, Roy BJ, <u>Keszler M</u>, Kinsella JP: Low-dose Inhaled Nitric Oxide Therapy for Persistent Pulmonary Hypertension of the Newborn. N Engl J Med 2000;342:469-74.
- 23. Abubakar KM, <u>Keszler M</u>: Patient-Ventilator Interactions in Newer Modes of Mechanical Ventilation. Pediatric Pulmonology 2001;32:71-75.

- 24. Wiswell TE, Knight GR, Finer NN, Donn SM, Desai H, Walsh WF, Sekar KC, Bernstein G, <u>Keszler M</u>, Visser VE, Merritt TA, Mannino FL, Mastroianni L, Marcy B, Revak SD and Cochrane CG: A Multicenter Randomized, Controlled Trial Comparing Surfaxin® (Lucinactant) Lavage with Standard Care for Treatment of Meconium Aspiration Syndrome. Pediatrics 2002;109:1081-1087.
- 25. Plavka R, Kopecky P, Sebron V, Leiska A, Svihovec P, Ruffer J, Dokoupilova M, Zlatohlavkova B, Janus V, <u>Keszler M</u>: Prophylactic vs. early rescue surfactant in extremely premature newborns ventilated by high-frequency oscillatory ventilation. Intensive Care Med 2002;28:1483-1490.
- Clark RH, Huckaby JL, Kueser TJ, Walker MW, Southgate WM, Perez JA, Roy BJ, <u>Keszler M</u>: Lowdose Inhaled Nitric Oxide Therapy for Persistent Pulmonary Hypertension: One-Year Follow-Up. J Perinatol 2003;23:300-3.
- 27. Barr S, Poggi S, <u>Keszler M</u>: Triplet Morbidity and Mortality in a Large Case Series. J Perinatol 2003;23:368-371.
- 28. Poggi SH, Barr S, Cannum R, Collea JV, Landy HJ, <u>Keszler M</u>, Ghidini A. Risk Factors for Pulmonary Edema in Triplet Pregnancies. J Perinatol 2003 23, 462465.
- 29. <u>Keszler M</u>, Abubakar KM: Volume Guarantee: Stability of Tidal Volume and the Incidence of Hypocarbia. Pediatric Pulmonology 2004;38:240-245.
- 30. Abubakar KM, <u>Keszler M</u>. Effect of Volume Guarantee Combined with Assist/Control vs. Synchronized Intermittent Mandatory Ventilation. J Perinatol 2005;25: 638-642.
- 31. Plavka R, Dokoupilova M, Pazderova L, Kopecky P, Sebron V, Zapadlo M, <u>Keszler M.</u> High-Frequency Jet Ventilation Improves Gas Exchange In Extremely Immature Infants With Evolving Chronic Lung Disease. Am J Perinatol. 2006;23:467-72.
- Nassabeh Montazami S, Abubakar K, <u>Keszler M.</u> The Impact of Instrumental Dead-space in Volume Targeted Ventilation of the Extremely Low Birth Weight Infant. Pediatr Pulmonol. 2009;44:128-33.
- 33. <u>Keszler M</u>, Nassabeh Montazami S, Abubakar K. Evolution of Tidal Volume Requirement During the First Three Weeks of Life in Extremely Low Birth Weight Infants Ventilated with Volume-targeted Ventilation. *Arch Dis Child Fetal Neonatal Ed* 2009;94:F279-82.
- Barton A, Abubakar, K Berg J, <u>Keszler M</u>. The Effect of Arterial pH on Oxygenation Persists Even in Infants Treated with Inhaled Nitric Oxide. Pulmonary Medicine 2011, Article ID 189205, doi:10.1155/2011/189205.
- 35. <u>Keszler M</u>, Brugada M, Abubakar K. Effective Ventilation At Conventional Rates With Tidal Volume Below Instrumental Dead Space: a Bench Study. Arch Dis Child Fetal-Neonatal Edition 2012;**97**:F188–F192.

- 36. Keszler PA, Nagaraj P, Abubakar K, <u>Keszler M.</u> Effect of Variable Expiratory Flow Rate During the Expiratory Phase on CO<sub>2</sub> Elimination. Research and Reports in Neonatology 2012; 2:33-37.
- 37. Mazela J, Chmura K, Kulza M, Henderson C, Gregory TJ, Moskal A, Sosnowski TR, Florek E, Kramer L, <u>Keszler M.</u> Aerosolized Albuterol Sulfate Delivery Under Neonatal Ventilatory Conditions: In Vitro Evaluation of a Novel Ventilator Circuit Patient Interface Connector. J Aerosol Med Pulm Drug Deliv. 2013 Mar 19. [Epub ahead of print]

# CORPORATE AUTHORSHIP OF MULTICENTER TRIALS

- 1. Lotze A, Mitchell BR, Bulas DI, Zola EM, Shalwitz RA, Gunkel JH and the Survanta in Term Infants Study Group. Multi-Center Study of Surfactant (Beractant) Use in the Treatment of Term Infants with Severe Respiratory Failure. J Pediatr. 1998;132:40-47.
- 2. Finer NN, Carlo WA, Walsh MC, Rich W, Gantz MG, Laptook AR, Yoder BA, Faix RG, Das A, Poole WK, Donovan EF, Newman NS, Ambalavanan N, Frantz ID 3rd, Buchter S, Sánchez PJ, Kennedy KA, Laroia N, Poindexter BB, Cotten CM, Van Meurs KP, Duara S, Narendran V, Sood BG, O'Shea TM, Bell EF, Bhandari V, Watterberg KL, Higgins RD for the SUPPORT Study Group of the Eunice Kennedy Shriver NICHD Neonatal Research Network, Early CPAP Versus Surfactant in Extremely Preterm Infants. N Engl J Med. 2010 May 27;362(21):1970-9.
- 3. Carlo WA, Finer NN, Walsh MC, Rich W, Gantz MG, Laptook AR, Yoder BA, Faix RG, Das A, Poole WK, Schibler K, Newman NS, Ambalavanan N, Frantz ID 3rd, Piazza AJ, Sánchez PJ, Morris BH, Laroia N, Phelps DL, Poindexter BB, Cotten CM, Van Meurs KP, Duara S, Narendran V, Sood BG, O'Shea TM, Bell EF, Ehrenkranz RA, Watterberg KL, Higgins RD for the SUPPORT Study Group of the Eunice Kennedy Shriver NICHD Neonatal Research Network. Target Ranges of Oxygen Saturation in Extremely Preterm Infants. N Engl J Med. 2010 May 27;362(21):1959-69.
- 4. Vaucher YE, Peralta-Carcelen M, Finer NN, Carlo WA, Gantz MG, Walsh MC, Laptook AR, Yoder BA, Faix RG, Das A, Schibler K, Rich W, Newman NS, Vohr BR, Yolton K, Heyne RJ, Wilson-Costello DE, Evans PW, Goldstein RF, Acarregui MJ, Adams-Chapman I, Pappas A, Hintz SR, Poindexter B, Dusick AM, McGowan EC, Ehrenkranz RA, Bodnar A, Bauer CR, Fuller J, O'Shea TM, Myers GJ, Higgins RD; SUPPORT Study Group of the Eunice Kennedy Shriver NICHD Neonatal Research Network. Neurodevelopmental Outcomes in the Early CPAP and Pulse Oximetry Trial. N Engl J Med. 2012;367:2495-504. doi: 10.1056/NEJMoa1208506.

#### **OTHER PEER-REVIEWED PUBLICATIONS**

- 1. <u>Keszler M</u>: Current Status of High-frequency Jet Ventilation. Crit Care Med 1983;11:579.
- 2. <u>Keszler M</u>: Re: Antenatal Steroids. Am J Obst Gynecol. 1983;147:851.
- 3. Siva Subramanian KN, <u>Keszler M</u>, Hoy G. ECMO for Severe Neonatal Respiratory Failure. Contemp OB/GYN 1986;28:21-37.
- 4. Siva Subramanian KN, <u>Keszler M</u>, Hoy G. Neonatal Extracorporeal Membrane Oxygenation. Contemp Pediatr 1987;4:118-122.
- 5. <u>Keszler M</u>, Donn SM, Spitzer A: High-frequency Jet Ventilation in Respiratory Distress Syndrome. J Pediatr. 1991;119:340.
- McVeen RV, Lorch V, Carroll RC, Goldberg L, <u>Keszler M</u>, Podlasek S, Stewart DL: Changes in Fibrinolytic Factors in Newborns During Extracorporeal Membrane Oxygenation. Am J Hematol. 1991;38:254-255.
- 7. <u>Keszler M</u>: Dead Space Reduction and Jet Ventilation. Reply. J Pediatr. 1992;120:666.
- 8. <u>Keszler M</u>, Siva Subramanian KN. Extracorporeal Membrane Oxygenation. Contemp OB/GYN. 1994;36:99-112.
- 9. <u>Keszler M</u>: Extracorporeal Membrane Oxygenation: Evolution, Present Status and Future Directions. Proceedings of the American Academy of Cardiovascular Perfusion 1990;11:67-73.
- 10. Keszler M: High-frequency Jet Ventilation in Preterm Infants. Reply. Pediatrics. 1998;102:159.
- 11. Keszler M: Abuse of the English Language. J Periantol 1999,19:82.
- 12. Higgins RD, <u>Keszler M</u>. Perinatal Vascular Development. Cardiovasc Res. Editorial. 2001 Jul;51(1):7-8.
- <u>Keszler M</u>, Durand D. High-frequency Ventilation. In: Donn SM and Wiswell T, Guest Eds. Clinics in Perinatology: Advances in Mechanical Ventilation and Surfactant Therapy. W.B. Saunders Co. 01-SEP-2001; 28(3): 579-607.
- 14. <u>Keszler M</u>, Abubakar KM and Mammel MC: Response to Olsen, et al. Study Comparing SIMV & PSV. J Perinatol 2003;23:434-35.
- 15. Plavka R and <u>Keszler M</u>. Interactions Between Surfactant and Ventilatory Support in Newborns with Primary Surfactant Deficiency. Review. Biol Neonate. 2003;84:16-22.

- 16. <u>Keszler M</u>, Abubakar KM: Advances in Neonatal Ventilation. In: eNeonatal Reviews. Johns Hopkins on-line publication. Lehman CU, Lawson EE and Nogee LM, Harbold LA. Eds. July 2004: <u>www.hopkinscme.org/ofp/eneonatalreview/previssues0704.html</u>
- 17. Hines RN, Adams J, Buck GM, Faber W, Holson JF, Jacobson SW, <u>Keszler M</u>, McMartin K, Segraves RT, Singer LT, Sipes IG, Williams PL: NTP-CERHR Expert Panel Report on the Reproductive and Developmental Toxicity of Fluoxetine. Birth Defects Research 2004;71:193-280.
- 18. Keszler M. Volume-Targeted Ventilation. J Perinatol 2005;25:S19-22.
- 19. <u>Keszler M.</u> Volume Guarantee and Ventilator-induced Lung Injury: Goldilocks' rules apply. Commentary, Pediatric Pulmonology 2006;41:364-66.
- 20. <u>Keszler M.</u> Volume-targeted Ventilation. NeoReviews. American Academy of Pediatrics online publication. <u>http://neoreviews.aappublications.org/cgi/content/extract/7/5/e250</u>. May 2006.
- <u>Keszler M.</u> Pressure Support Ventilation And Other Approaches To Overcome Imposed Work Of Breathing. NeoReviews. American Academy of Pediatrics online publication. <u>http://neoreviews.aappublications.org/cgi/content/extract/7/5/e226</u>. May 2006.
- <u>Keszler M.</u> High-Frequency Ventilation: Evidence-based Practice and Specific Clinical Applications. NeoReviews. American Academy of Pediatrics online publication. <u>http://neoreviews.aappublications.org/cgi/content/extract/7/5/e234</u>. May 2006.
- 23. Keszler M. Volume-targeted Ventilation. Early Human Development 2006; 82: 811-818.
- 24. <u>Keszler M</u>, Abubakar KM. Volume Guarantee Ventilation. In: Donn SM and Wiswell T, Guest Eds. Clinics in Perinatology: Update on Surfactant and Mechanical Ventilation. Elsevier Press, 01-MAR-2007; 34(1):107-16.
- 25. Keszler M. Clinical Guidelines for the Use of Volume Guarantee: Practice Guidelines for the Bedside. Clinics in Perinatology 34 (2007) 116e1–116e4.
- 26. Keszler M. Strategy Matters. Editorial. American Journal of Perinatology 2007;24:147-8.
- 27. <u>Keszler M</u>. Functional Capillary Density Measurement: A Useful New Tool to Assess the Peripheral Circulation in Infants? Critical Care Medicine Editorial. 2009;37:1173-4.
- 28. Keszler M. State of the Art in Mechanical Ventilation. Journal of Perinatology, 2009;29:262-75.
- <u>Keszler M</u>. INSURE, Infant Flow, Positive Pressure and Volume Guarantee Tell us What is Best: Selection of Respiratory Support Modalities in the NICU. Early Human Development 2009;85 S53– S56.

- 30. <u>Keszler M</u>. Leaks Cause Problems Not Only in Washington Politics! Has the Time Come for Cuffed Endotracheal Tubes for Newborn Ventilation? Editorial, Pediatric Critical Care Medicine, 2011 *Mar*; *12*(2):231-2.
- 31. Sant'Anna GM and <u>Keszler M</u>. Weaning from Mechanical Ventilation. Clinics in Perinatology *39:3* Advances in Respiratory Care of the Newborn—Aschner and Polin, Eds, Elsevier. Sept 2012.
- 32. <u>Keszler M</u>. Guidelines for Rational and Cost-effective Use of iNO Therapy in Term and Preterm Infants. Journal of Clinical Neonatology 2012;1:59-63. Online publication DOI: 10.4103/2249-4847.96739.
- 33. Morley CJ, <u>Keszler M</u>. Ventilators Do Not Breathe. Leading Article. Arch Dis Child Fetal Neonatal Ed. 2012;97:F392-94.
- 34. Sant'Anna GM, <u>Keszler M</u>. Developing a Neonatal Unit Ventilation Protocol for the Preterm Baby. Early Hum Dev. 2012;88:925-9. doi: 10.1016/j.earlhumdev.2012.09.010.
- 35. <u>Keszler M.</u> What if You Could See Lung Inflation in Real Time? J Pediatr 2013;162:670-2. doi: 10.1016/j.jpeds.2012.11.091.
- 36. <u>Keszler M.</u> Congenital Diaphragmatic Hernia: Not Quite There Yet. J Pediatr. 2013;163:15-6. doi: 10.1016/j.jpeds.2013.02.007.
- 37. <u>Keszler M.</u> Update on Mechanical Ventilatory Strategies. NeoReviews 2013; 14:e237-e251. American Academy of Pediatrics online publication. http://neoreviews.aappublications.org/content/14/5/e237

## BOOKS, BOOK CHAPTERS

- 1. <u>Keszler M</u>, Kolobow T. Veno-venous ECMO. In: Arensman R and Cornish D, eds.: Extracorporeal Membrane Oxygenation. Blackwell Scientific. 1993.
- 2. <u>Keszler M</u>, Short BL. Veno-venous ECMO. In: Short BL, Ed.: Neonatal ECMO Specialist Training Manual. Extracorporeal Life Support Organization 1993.
- 3. <u>Keszler M</u>, Siva Subramanian KN. Neonatal Extracorporeal Membrane Oxygenation. In: Queenan J, Ed. Management of High-Risk Pregnancy. Blackwell Scientific 1994.
- 4. <u>Keszler M</u>. Principles and Practice of Veno-venous ECMO. Chapter Commentary. In Zwischenberger JB and Bartlett RH, Eds. Extracorporeal Life Support Organization 1995.
- 5. <u>Keszler M</u>. Extracorporeal Membrane Oxygenation. In Burg FD, Ingelfinger JR, Polin RA and Wald ER, Eds. Current Pediatric Therapy. 16th edition, WB Saunders Co., 1998.
- 6. <u>Keszler M</u>, Siva Subramanian KN. Neonatal Extracorporeal Membrane Oxygenation. In: Queenan J, Ed. Management of High-Risk Pregnancy, Second edition. Blackwell Scientific 1999.

- 7. <u>Keszler M</u>. High-Frequency Jet Ventilation. In: Sinha SK and Donn SM, Eds. Manual of Neonatal Respiratory Care. Futura Publishing Company, New York, 2000.
- 8. <u>Keszler M</u>. Extracorporeal Membrane Oxygenation. In: Burg FD, Vaughn VC,III, Nelson KG, Eds. Pediatrics: A Problem-Based Review. W.B. Saunders, Philadelphia, 2001.
- 9. <u>Keszler M</u>. Conventional Mechanical Ventilation of the Neonate. In: Spitzer AR. Ed, Neonatal Secrets. Hanley and Belfus 2001.
- 10. <u>Keszler M</u>. High-frequency Jet Ventilation. In: Spitzer AR, Ed. Intensive Care of the Fetus and Neonate, Hanley and Belfus, 2005.
- 11. <u>Keszler M</u>. High-frequency Jet Ventilation. In: Sinha SK and Donn SM, Eds. Manual of Neonatal Respiratory Care, Second Edition. Elsevier Press, 2006.
- 12. <u>Keszler M</u>. The Bunnell Life-Pulse High-frequency Jet Ventilator. In: Sinha SK and Donn SM, Eds. Manual of Neonatal Respiratory Care, Second Edition. Elsevier Press, 2006.
- 13. <u>Keszler M</u> and Abubakar K. Chapter 2: Physiologic Principles. In: *Assisted Ventilation of the Neonate* Fifth Edition, Goldsmith J and Karotkin E, Editors. Elsevier Publishing, 2010.
- 14. <u>Keszler M</u>, Abubakar, MK. The Respiratory System. In: Keszler M, Section Editor, Neonatology, Textbook of Clinical Pediatrics, Abdelaziz Elzouki, Editor, Springer-Verlag, Berlin 2011.
- 15. <u>Keszler M</u>. Extracorporeal MembraneOxygenation. In: Keszler M Section Editor, Neonatology, Textbook of Clinical Pediatrics, Abdelaziz Elzouki, Editor, Springer-Verlag, Berlin 2011.
- 16. <u>Keszler M</u>. Conventional Mechanical Ventilation. In: Keszler M Section Editor, Neonatology, Textbook of Clinical Pediatrics, Abdelaziz Elzouki, Editor, Springer-Verlag, Berlin 2011.
- 17. van Kaam AH, <u>Keszler M</u>. High-Frequency Ventilation. In: Keszler M Section Editor, Neonatology, Textbook of Clinical Pediatrics, Abdelaziz Elzouki, Ed, Springer-Verlag, Berlin 2011.
- 18. <u>Keszler M</u>. High-frequency Jet Ventilation. In: Sinha SK and Donn SM, Eds. Manual of Neonatal Respiratory Care, Third Edition. Springer New York, Dordrecht, Heidelberg, London, 2012.
- <u>Keszler M</u>. The Bunnell Life-Pulse High-frequency Jet Ventilator. In: Sinha SK and Donn SM, Eds. Manual of Neonatal Respiratory Care, Third Edition. Springer New York, Dordrecht, Heidelberg, London, 2012.
- 20. <u>Keszler M.</u> Patient-triggered and Volume-targeted Ventilation. In: Acute Respiratory Care. Askin DF, Editor. NICU Ink Publishers, 2012.
- <u>Keszler M</u>, Pillow JJ, Courtney S. High-Frequency Ventilators. In: Neonatal and Pediatric Mechanical Ventilation: From Basics to Clinical Practice. Peter Rimensberger, Ed. Springer Publishing. In press.

- 22. <u>Keszler M</u>. Indications for Alternative Ventilation Modes HFJV. In: Neonatal and Pediatric Mechanical Ventilation: From Basics to Clinical Practice. Peter Rimensberger, Ed. Springer Publishing. In press.
- 23. <u>Keszler M</u>. Clinical Use of Non-Conventional Modes of Ventilator Support: High Frequency Jet Ventilation. In: Neonatal and Pediatric Mechanical Ventilation: From Basics to Clinical Practice. Peter Rimensberger, Ed. Springer Publishing. In press.
- 24. Dargaville P and <u>Keszler M</u>. Practical Evidence-Based and Goal Directed Approach to Conventional Mechanical Ventilation: Setting the Ventilator in the NICU. In: Neonatal and Pediatric Mechanical Ventilation: From Basics to Clinical Practice. Peter Rimensberger, Ed. Springer Publishing. In press.
- 25. <u>Keszler M.</u> Practical Evidence-Based and Goal Directed Approach to Non-Conventional Mechanical Ventilation: High-Frequency Jet Ventilation. In: Neonatal and Pediatric Mechanical Ventilation: From Basics to Clinical Practice. Peter Rimensberger, Ed. Springer Publishing, In press.
- 26. <u>Keszler M</u>. Volume Guarantee Ventilation. In: Neonatal and Pediatric Mechanical Ventilation: From Basics to Clinical Practice. Peter Rimensberger, Ed. Springer Publishing. In press.

# OTHER NON-PEER REVIEWED PUBLICATIONS

- 1. Safar P, Klain M, <u>Keszler M.</u> In Memoriam: Hugo Keszler, MD, May 20, 1916-August 19, 1994. Critical Care Medicine1995;23(4):622
- Barr SM, <u>Keszler M</u>. Shared Responsibility for Neonatal Outcomes. <u>http://bmj.com/cgi/eletters/</u>323/7325/1327#19858 Electronic response to Luo ZC, Karlberg J. Timing of Birth and Infant and Early Neonatal Mortality in Sweden 1973-95: Longitudinal Birth Register Study BMJ 2001;323:1327-31.
- 3. <u>Keszler M.</u> Respiratory Support of the Newborn Infant: Where Are We and Where Do We Need to Go? Preface to Spanish Respiratory Care Manual 2009.

## PUBLICATIONS IN REVIEW

- 1. Sharma S, Clark S, Abubakar K, <u>Keszler M</u>. Tidal Volume Requirement in Infants with Congenital Diaphragmatic Hernia. Submitted to Arch Dis Child Fetal-Neonatal Edition.
- 2. Nagaraj P, Abubakar K, <u>Keszler M.</u> Does Bubble CPAP Enhance CO<sub>2</sub> Elimination When Compared to Ventilator CPAP?
- 3. Bahri M, Eig M, Doroshow R, Baumgart S, and <u>Keszler M</u>. Echocardiographic Predictors of Mortality in Congenital Diaphragmatic Hernia.

- 4. Sharma S, <u>Keszler M</u>. Tidal Volume Requirement at Normocapnia in Infants with Congenital Diaphragmatic Hernia.
- 5. <u>Keszler M</u>, Abubakar K. Volume Guarantee Ventilation During Surgery for Closure of Patent Ductus Arteriosus

# ABSTRACTS

- 1. <u>Keszler M</u>, Glazer N, Benfield DG: New grading system for pulmonary interstitial emphysema correlation of severity and outcome. Ohio Perinatal Association Meeting, Cincinnati, OH, June 1982.
- 2. <u>Keszler M</u>, Siva Subramanian KN: New pediatric endotracheal tubes for high-frequency jet ventilation. Pediatric Research 1984;18:395A.
- 3. <u>Keszler M</u>, Molina B, Siva Subramanian KN: Limits of high-frequency jet ventilation in small subjects. Pediatric Research 1984;18:394A.
- 4. <u>Keszler M</u>, Siva Subramanian KN, Molina B: Combined high-frequency jet ventilation and conventional ventilation in meconium aspiration. First Annual Conference on High Frequency Jet Ventilation, Salt Lake City, Utah April 1984.
- 5. <u>Keszler M</u>, Klappenbach RS, Reardon E: Lung pathology after high-frequency jet ventilation combined with slow intermittent mandatory ventilation in a canine model of meconium aspiration. Third Conference on High Frequency Jet Ventilation of Infants, Salt Lake City, Utah, April 1986.
- 6. <u>Keszler M</u>, Siva Subramanian KN, Molina B: High-frequency jet ventilation combined with low rate intermittent mandatory ventilation in an animal model of meconium aspiration. American Academy of Pediatrics, Section on Perinatal-Neonatal Pediatrics, November 1986.
- 7. <u>Keszler M</u>, Moront MG, Siva Subramanian KN: Pulmonary management during extracorporeal membrane oxygenation. Pediatric Research 1987;21:456A.
- 8. <u>Keszler M</u>, Moront MG, Cox CB, Milewski M, Visner MS: A single cannula tidal flow system for ECMO. Proceedings of the Special Ross Conference "Two great controversies in Neonatology" December 1987, Washington, D.C.
- 9. <u>Keszler M</u>, Siva Subramanian KN, Smith YA, Dhanireddy R, Mehta N, Molina B: Is earlier application of venoarterial ECMO really necessary? Proceedings of the Special Ross Conference "Two great controversies in Neonatology" December 1987, Washington, D.C.
- 10. <u>Keszler M</u>, Moront MG, Visner MS, Cox C, Milewski M: Oxygen delivery with a tidal flow venovenous system for ECMO. Clinical Research 1988;36:49A.

- 11. Moront M, Katz N, <u>Keszler M</u>, Visner MS, Hoy G, O'Connell J, Cox CB, Wallace R: Extracorporeal membrane oxygenation (ECMO) in Neonates. Proceedings of The American Association of Thoracic Surgeons Annual Meeting, April 1988, Los Angeles, CA.
- 12. <u>Keszler M</u>, Donn S, Buciarelli R, Harris T, Bunnell B: Progress Report on the collaborative study of high-frequency jet ventilation in infants with pulmonary interstitial emphysema. Fifth Annual Conference on High Frequency Ventilation of Infants, Snowbird, UT, April 1988.
- 13. <u>Keszler M</u>, Siva Subramanian KN, Cox CB, Moront MG: Pulmonary management during extracorporeal membrane oxygenation. 2nd Congress of the Scandinavian Association for ECMO. Gothenburg, Sweden, May 1988.
- 14. <u>Keszler M</u>, Moront MG, Cox CB, Visner MS: A single cannula tidal flow system for ECMO. 2nd Congress of the Scandinavian Association for ECMO, Gothenburg, Sweden, May 1988.
- 15. <u>Keszler M</u>, Ryckman F, McDonald J, Cox CB, Moront MG: Prospective, randomized study of high vs. low PEEP during extracorporeal membrane oxygenation. First Annual Mid-Atlantic Perinatal Research Conference, October 1988, Irvington, Va.
- <u>Keszler M</u>, Cox C, Miller D, Conti J, Boegli M, Milewski M: Long-term support with a single lumen tidal flow system for ECMO. Fifth Annual Conference on Neonatal ECMO, Snowmass CO, February 1989.
- <u>Keszler M</u>, McDonald J, Cornish D, Ryckman F, Cox CB: Collaborative study of pulmonary management during ECMO. Fifth Annual Conference on Neonatal ECMO, Snowmass CO, February 1989.
- 18. <u>Keszler M</u>, Donn S, Buciarelli R, Harris T, Bunnell B: Collaborative randomized clinical trial of high-frequency jet ventilation in infants with pulmonary interstitial emphysema. Sixth Annual Conference on High Frequency Ventilation of Infants, Snowbird, UT, April 1989.
- 19. <u>Keszler M</u>, Cox C, Miller D, Conti J, Boegli M, Milewski M: Long-term support with a single lumen tidal flow system for ECMO. Pediatric Research 1989;25:241A.
- 20. <u>Keszler M</u>, McDonald J, Cornish D, Ryckman F, Cox C, Moront MG: Pulmonary management during extracorporeal membrane oxygenation. Pediatric Research 1989;25:316A.
- 21. <u>Keszler M</u>, Carbone MT, Cox C: Severe persistent pulmonary hyper-tension following elective repeat Cesarean delivery: potentially preventable cause of respiratory failure leading to ECMO. Proceedings of the American Academy of Pediatrics Fall Meet., October 1989, Chicago, IL.
- 22. <u>Keszler M</u>, Cox C, Moront MG: Factors affecting the length of ECMO therapy. Sixth Annual Children's Hospital National Medical Center ECMO Symposium, February 1990, Breckenridge, CO.

- 23. <u>Keszler M</u>, Carbone MT, Cox C, Richards E: Further analysis of data from the collaborative HFV-PIE study: Predictors of successful outcome, complications and device safety. 7th Annual Conference on High Frequency Ventilation of Infants, April 1990, Snowbird, UT.
- 24. <u>Keszler M</u>, Moront MG, Finical S, Katz NM: Ligation of patent ductus arteriosus in extremely low birth weight infants. Pediatric Research 1990;27:234A.
- 25. <u>Keszler M</u>, Donn SM, Bucciarelli RL: Controlled multi-center trial of high-frequency jet ventilation in newborns with pulmonary interstitial emphysema. Pediatric Research 1990;27:309A.
- 26. <u>Keszler M</u>, Goldberg L, Marmon L: High-frequency jet ventilation decreases flow through tracheoesophageal fistula. Pediatric Research 1991;29:60A.
- 27. Goldberg L, <u>Keszler M</u>: Gentamicin toxicity following simultaneous oral and intravenous administration. Pediatric Research 1991;29:322A.
- 28. Ringer SA, Richardson D, Sacher R, <u>Keszler M</u>, Winkelman R, Dodge B, Churchill WH: Blood utilization in neonatal intensive care. Blood 1991;78, Suppl 1:353.
- 29. <u>Keszler M</u>, et al: Multi-center controlled trial comparing high-frequency jet ventilation and conventional ventilation in newborn infants with pulmonary interstitial emphysema. Pediatrics Digest 1992;1:21-22.
- 30. Kiernan SC, Pinckert TL, <u>Keszler M</u>: Ultrasound guidance of bladder aspiration. Pediatric Research 1992;31:123A.
- 31. Ringer SA, Richardson DK, Sacher RA, <u>Keszler M</u>, et al: Determinants of blood use in neonatal intensive care: A multivariate model. Pediatric Research 1992;31:219A.
- 32. <u>Keszler M</u>, Goldberg L: Positive end-expiratory pressure during extracorporeal membrane oxygenation (ECMO). Pediatric Research 1992; 31:312A.
- 33. Gibbons MD, Horan JJ, Dejter SW and <u>Keszler M</u>: ECMO: An adjunct in the management of the neonate with severe respiratory distress and congenital anomalies of the urinary tract. Proceedings of the American Urologic Association meeting, May 1992, Washington, D.C.
- 34. Goldberg LA, Marmon LM, Wallace A, Boegli MJ, and <u>Keszler M</u>: Peritoneal ventilation with perfluorocarbons. Fourth Annual Extracorporeal Life Support Organization Meeting, October 1992, Detroit, MI.
- 35. <u>Keszler, M</u>: High-volume strategy for HFJV in uncomplicated RDS: Preliminary observations regarding safety and efficacy. 1992 Mid-Atlantic Conference on Perinatal Research, October 1992, Irvington, VA.

- 36. Ringer SA, Richardson DK, Sacher RA, <u>Keszler M</u>, et al: Transfusions in Neonates: What determines practice styles and differences in usage? Hot Topics '92 in Neonatology December 1992, Washington, D.C.
- 37. <u>Keszler M</u>, Goldberg LA, Boegli, MJ: Hemodynamic effects of high-frequency jet ventilation (HFJV) in subjects with low chest wall compliance. Pediatric Research 1993;33:331A.
- 38. <u>Keszler M</u>, Goldberg LA, Wallace A: High frequency jet ventilation (HFJV) in subjects with low chest wall compliance. Pediatric Research 1993;33:331A.
- 39. <u>Keszler M</u>, Seidel T: Background intermittent mandatory ventilation during high frequency jet ventilation. Pediatric Research 1993;33:331A.
- 40. Goldberg LA, Marmon LM, Wallace A, Boegli MJ, <u>Keszler M</u>: Peritoneal ventilation with perfluorocarbons. Pediatric Research 1993;33:326A.
- 41. Okanlami O, <u>Keszler M</u>, Dhanireddy R: Effect of Intralipid infusion on pulmonary mechanics in VLBL infants. Pediatric Research 1993;33:339A.
- 42. <u>Keszler M</u>, Davis J, Spitzer A, Carlo W: "High volume" strategy of high-frequency jet ventilation in the treatment of newborns with uncomplicated RDS. Tenth Conference on High Frequency Ventilation of Infants, Snowbird, Utah, April 1993.
- 43. <u>Keszler M</u>, Goldberg LA, Wallace A: High-frequency jet ventilation (HFJV) in subjects with low chest wall compliance. Tenth Conference on High Frequency Ventilation of Infants, Snowbird, Utah, April 1993.
- 44. <u>Keszler M</u>, et al: A prospective multi center randomized study of high vs. low positive endexpiratory pressure during extracorporeal membrane oxygenation. In: Yearbook of Neonatal-Perinatal Medicine, 1993, Mosby, Inc. Fanaroff A, Klaus M, editors.
- 45. Goldberg L, Carpenter G, Boegli M, <u>Keszler M:</u> The effect of PEEP on cardiac output in newborns on ECMO. Fifth Annual Extracorporeal Life Support Organization Meeting, October 1993, Detroit, MI.
- 46. Okanlami O, <u>Keszler M</u>, Dhanireddy R: Pulmonary mechanics during Intralipid infusion in VLBL infants: gestational age differences. Southern Society for Pediatric Research, New Orleans, February 1994.
- 47. <u>Keszler M</u>: High PEEP during ECMO still searching for answers. Tenth Annual Children's Hospital National Medical Center ECMO Symposium, February 1994, Keystone, CO.
- 48. Jennings L, <u>Keszler M</u>: Is ECMO indicated in infants with pulmonary hypoplasia? Tenth Annual Children's Hospital National Medical Center ECMO Symposium, February 1994, Keystone, CO.

- Goldberg L, Garra B, Boegli M, <u>Keszler M:</u> Effect of PEEP on cerebral blood flow in newborns on ECMO. Tenth Annual Children's Hospital National Medical Center ECMO Symposium, February 1994, Keystone, CO.
- 50. <u>Keszler M:</u> High positive end-expiratory pressure (PEEP) in infants with congenital diaphragmatic hernia. Pediatric Research 1994;35:340A.
- 51. Goldberg L, Carpenter G, Boegli M, <u>Keszler M:</u> The effect of PEEP on cardiac output (CO) in newborns on ECMO. Pediatric Research 1994;35:334A.
- 52. Goldberg L, Garra B, Boegli M, <u>Keszler M:</u> Effect of positive end-expiratory pressure on cerebral blood flow in newborns on ECMO. Pediatric Research 1994;35:334A.
- 53. Jennings L, <u>Keszler M</u>: Is ECMO indicated in infants with pulmonary hypoplasia? Pediatric Research 1994;35:339A.
- 54. Okanlami O, <u>Keszler M</u>, Dhanireddy R: Pulmonary Mechanics during Intralipid infusion in preterm infants. Pediatric Research 1994;35:348A.
- 55. Holliday M, Hoy D, Smith Y, <u>Keszler M</u>, et al: Obstructive apnea in preterm infants less than 34 weeks gestation. Pediatric Research 1994;35:393A.
- 56. Keszler M, DeLosh T: Iatrogenic prematurity leading to ECMO. Pediatric Research 1995;37:262A.
- 57. <u>Keszler M</u>, DeLosh T: Elective Cesarean section and persistent pulmonary hypertension. Pediatric Research 1995;37:337A.
- 58. <u>Keszler M</u>: Ventilator strategy and oxygenation in high-frequency ventilation. Pediatric Research 1995;37:337A.
- 59. Prabhu V, <u>Keszler M</u>, Dhanireddy R: Effects of nebulized versus intravenous furosemide on pulmonary function in infants with chronic lung disease. Pediatric Research 1995;37:346A.
- 60. Prabhu V, <u>Keszler M</u>, Dhanireddy R: Comparison of two doses of nebulized furosemide on pulmonary function in infants with chronic lung disease. Southern Society for Pediatric Research, New Orleans, LA, February 1996.
- 61. Dalton HJ, Grazette V, Butler V, Smith J, <u>Keszler M</u>: Delivery of inhaled Nitric Oxide during high-frequency jet ventilation. Thirteenth Conference on High-Frequency Ventilation of Infants, Snowbird, Utah, March 1996.
- 62. <u>Keszler M</u>: High-frequency jet ventilation reduces chronic lung disease; Ventilator strategy affects the incidence of adverse outcomes. Thirteenth Conference on High-Frequency Ventilation of Infants, Snowbird, Utah, March 1996.

- 63. Holliday MA, Pinckert T, Kiernan SC, Kunos I, Angelus P, <u>Keszler M</u>: Dorsal penile block versus placebo for circumcision in low birth weight neonates. Pediatric Research 1996;39:216A.
- 64. Prabhu V, <u>Keszler M</u>, Dhanireddy R: Comparison of two doses of nebulized furosemide on pulmonary function in infants with chronic lung disease. Pediatric Research 1996;39:346A.
- 65. <u>Keszler M</u>: High-frequency jet ventilation reduces chronic lung disease; Strategy affects the incidence of adverse outcomes. Pediatric Research 1996;39:336A.
- 66. <u>Keszler M</u>: High-frequency jet ventilation & conventional ventilation: gas exchange and airway pressures. Pediatric Research 1996;39:336A.
- 67. Lotze A and the Survanta in Term Infants Study Group: Survanta pre-EMO trial: Multi-center evaluation of Survanta in treatment of term infants with severe respiratory failure. Pediatric Research 1996;39:226A.
- 68. Jennings L, Dyer K, <u>Keszler M</u>: Candida sepsis in the very low birth weight infant. Pediatric Research 1996;39:296A.
- 69. Prabhu V, <u>Keszler M</u>, Dhanireddy R: Comparison of two different doses of nebulized furosemide on pulmonary function in infants with chronic lung disease. J Investig Med 1997;45:195A.
- 70. <u>Keszler M</u>, Jennings LL: High-frequency jet ventilation in infants with decreased chest wall compliance. Pediatric Research 1997;41:257A.
- 71. <u>Keszler M</u>: Effect of breath termination criteria and endotracheal tube leak on tidal volume and inspiratory time in pressure support ventilation. Pediatric Research 1997;41:257A.
- 72. Dalton H, Hertzog J, Breheny N, <u>Keszler M</u>, Read C, Hauser G: Impact of inhaled nitric oxide (INO) on ECMO utilization and survival in severe respiratory failure. Pediatric Critical Care Colloquium 1997.
- 73. Dalton H, Hertzog J, <u>Keszler M</u>, Hauser G: Impact of inhaled nitric oxide (INO) on ECMO utilization and survival in severe respiratory failure. Society of Critical Care Medicine Journal 1997.
- 74. <u>Keszler M</u>: Response of Neonatology training programs to current challenges in healthcare. Pediatric Research 1998;43:272A.
- 75. Abubakar KM, <u>Keszler M</u>: Patient-ventilator interactions in newer modes of mechanical ventilation. Pediatric Research 1998;43:327A.
- 76. Wiswell TE, and the Surfaxin-Lavage for MAS Trial Group: Bronchoalveolar lavage with dilute Surfaxin TM (KL4-Surfactant) for the management of the meconium aspiration syndrome. Pediatric Research 1999;45:326A.

- 77. <u>Keszler M</u>, Abubakar KM: Volume targeted mechanical ventilation of newborns maintains more stable tidal volume but does not prevent hypocarbia in the first 24 hours of life. Pediatric Research 1999;45:307A.
- 78. Plavka R, Kopecky P, Sebron V, Leiska A, Svihovec P, Ruffer J, Dokoupilova M, Zlatohlavkova B, Janus V, <u>Keszler M</u>: Comparison of prophylactic and early rescue surfactant administration in extremely premature newborns with respiratory distress syndrome ventilated by high-frequency oscillatory ventilation. Seventeenth Conference on High-Frequency Ventilation of Infants and Children, Snowbird, Utah, April 2000.
- 79. Plavka R, Kopecky P, Sebron V, Leiska A, Svihovec P, Ruffer J, Dokoupilova M, Zlatohlavkova B, Janus V, <u>Keszler M</u>: Prophylactic vs. early rescue surfactant in extremely premature newborns ventilated by high-frequency oscillatory ventilation (HFOV). Pediatric Research 2001;49:409A.
- 80. Barr S, <u>Keszler M</u>: Is selective fetal reduction from triplets to twins justified on medical grounds? Pediatric Research 2002;51:364A.
- 81. Higgins RD, Chrousos GA, <u>Keszler M</u>, Angelus P: Early examination for prediction of retinopathy of prematurity. Pediatric Research 2002;51:406A.
- 82. Poggi S, Cannum R, Barr S, Collea J, Mclaren R, Landy H, <u>Keszler M</u>, Ghidini A: Pulmonary edema is associated with magnesium sulfate use and preeclampsia in triplet pregnancies. 24th Annual meeting of the Society for Maternal-Fetal Medicine, January 2003 in San Francisco, CA.
- 83. Sharma J, Rorke JM, Higgins RD, <u>Keszler M</u>. Five year experience with percutaneous central venous catheters (PCVC) in neonatal intensive care. Pediatric Research 2003;53:315A.
- 84. Bilagi A, Sharma J, Rorke JM, <u>Keszler M.</u> Trimming of Percutaneous Central Venous Catheters Prior to Insertion and Risk of Catheter Related Sepsis in the NICU. Pediatric Research 2004;55:400A.
- 85. Abubakar KM, Baghaee H, <u>Keszler M</u>. Safety and Feasibility of Inhaled Nitric Oxide Delivery with High-Frequency Jet Ventilation. Pediatric Research 2004;55:532A.
- 86. Abubakar KM, <u>Keszler M</u>. Volume Guarantee Is More Effective When Combined with Assist/Control Ventilation Than with Synchronized Intermittent Mandatory Ventilation (SIMV). Pediatric Research 2004;55:532A.
- 87. <u>Keszler M</u>, Abubakar KM. Volume Guarantee Accelerates Recovery from Forced Exhalation Episodes. Pediatric Research 2004;55:545A.
- 88. Barton A, Abubakar K, Berg J, <u>Keszler M</u>. Effect of Arterial pH on response to inhaled nitric oxide for persistent pulmonary hypertension. PAS 2005: 57: 2595

- 89. Plavka R, Dokoupilova M, Pazderova L, Kopecky P, Sebron V, <u>Keszler M</u>. High-frequency jet ventilation improves gas exchange in extremely immature infants with evolving chronic lung disease. PAS 2005;57:2061.
- 90. Abubakar K, Umeh A, Berg J, Rorke J, Folk L, <u>Keszler M.</u> Computerized Drug Dose Calculation To Reduce Medication Errors In The Neonatal Intensive Care Unit. Third National Advanced Practice Neonatal Nurses Conference, Savannah, GA, April 2006.
- 91. Montazami S, Abubakar K, <u>Keszler M.</u> Impact of Instrumental Dead Space on Volume Guarantee Mode of Ventilation in Extremely Low Birth Weight Infants. E-PAS2006:59:468
- 92. Montazami S, Abubakar K, <u>Keszler M.</u> Changes in Tidal Volume Requirement with Advancing Postnatal Age in Ventilated Extremely Low Birth Weight (ELBW) Infants. E-PAS2006:59:5560.339.
- 93. Abubakar K, Umeh A, Berg J, Rorke J, Folk L, <u>Keszler M.</u> Computerized Drug Dose Calculation To Reduce Medication Errors In The Neonatal Intensive Care Unit. E-PAS2006:59:4134.7.
- 94. Abubakar K, Montazami S, <u>Keszler M.</u> Volume Guarantee Accelerates Recovery From Endotracheal Tube Suctioning In Ventilated Preterm Infants. E-PAS2006:59:5560.343.
- 95. Rorke J, Schatz V, Erskine M, Shuniak N, Tuason, Lee J, Kilcullen P, Kane R, Peele A, Hillers T, Abubakar K, Ramasethu J, <u>Keszler M</u>. Decreasing Catheter Related Sepsis in the Neonatal Intensive Care Unit. 5<sup>th</sup> Annual 2006 Summer Institute on Evidence-Based Practice: "Quality Improvement, Quality Indicators", San Antonio, TX, June 2006.
- 96. <u>Keszler M</u> and Abubakar K. Elective Cesarean Delivery and Severe Respiratory Failure Requiring to ECMO. Poster at PAS annual meeting, Honolulu, HI, May 2008. E-PAS2008:634450.2.
- 97. Eick RJ, Abubakar K, <u>Keszler M</u>. Blood Lactate as a Marker of Late-Onset Neonatal Sepsis. Poster at PAS annual meeting, Honolulu, HI, May 2008. E-PAS2008:633762.39
- Eick RJ, Montazami S, Abubakar K, <u>Keszler M</u>. Impact of Instrumental Dead Space on Pressure Support Volume Guarantee Mode of Ventilation in Extremely Low Birth Weight Infants. Poster at PAS annual meeting, Honolulu, HI, May 2008. E-PAS2008:633763.1
- 99. Bahri M, Eig M, Doroshow R, Baumgart S, <u>Keszler M</u>. Echocardiographic Predictors of Mortality in Congenital Diaphragmatic Hernia. Poster at PAS annual meeting, Honolulu, Hawaii, May 2008.E-PAS2008:635848.9.
- 100. <u>Keszler M</u>, Abubakar K, Poliquin C. Does High PEEP Improve Survival in ECMO Patients? PAS annual meeting, Honolulu, HI, May 2008. E-PAS2008:63522.
- 101. <u>Keszler M</u>, Abubakar K. High Positive End-Expiratory Pressure (PEEP) and Duration of Extracorporeal Membrane Oxygenation (ECMO) PAS annual meeting, Honolulu, HI, May 2008. E-PAS2008:63523.

- 102. Bahr M, Eig M, Doroshow R, Baumgart S and <u>Keszler M</u>. Echocardiographic Predictors of Mortality in Congenital Diaphragmatic Hernia. 19<sup>th</sup> Annual ELSO Meeting, San Diego, CA, September 2008.
- 103. <u>Keszler M</u>, Brugada M, Abubakar K. Effective Alveolar Ventilation Occurs With Tidal Volume Less Than Dead Space Volume Even At Conventional Rates. PAS annual meeting, Baltimore, MD, May 2009. E-PAS2009:608
- 104. <u>Keszler M</u>, Brugada M, Abubakar K. Effect of Respiratory Rate on Effective Alveolar Ventilation With Tidal Volume Near Instrumental Dead Space Volume. PAS annual meeting, Baltimore, MD, May 2009. E-PAS2009:3858.109.
- 105. Brown AM, Berg J, Abubakar K, Rodan M, <u>Keszler M</u>. Blood Lactate Levels in Potential ECMO Candidates with Persistent Pulmonary Hypertension of the Newborn. Eastern Society for Pediatric Research Meeting, Philadelphia, PA, March 2010.
- 106. Sharma S, Abubakar K, <u>Keszler M</u>. Tidal Volume in Infants with Congenital Diaphragmatic Hernia. Eastern Society for Pediatric Research Meeting, Philadelphia, PA, March 2010.
- 107. Rostami N, <u>Keszler M</u>. Validation of Visible Light Tissue Oximetry in Newborn Infants. Eastern Society for Pediatric Research Meeting, Philadelphia, PA, March 2010.
- 108. Nagaraj P, Abubakar K, <u>Keszler M</u>. Does Bubble CPAP Enhance Carbon Dioxide Elimination Compared to Ventilator-Generated CPAP? Eastern Society for Pediatric Research Meeting, Philadelphia, PA, March 2010.
- 109. Sharma S, Abubakar KM, <u>Keszler M</u>. Tidal Volume in Infants with Congenital Diaphragmatic Hernia. PAS meeting Vancouver, BC, CA, May 2010. E-PAS20101466.146.
- 110. Rostami N, <u>Keszler M</u>. Validation of Visible Light Tissue Oximetry in Newborn Infants. PAS meeting Vancouver, BC, CA, May 2010. E-PAS20104407.320.
- 111. Nagaraj P, Abubakar K, <u>Keszler M</u>. Does Bubble CPAP Enhance Carbon Dioxide Elimination Compared to Ventilator-Generated CPAP? PAS meeting Vancouver, BC, CA, May 2010. E-PAS20104407.300.
- 112. Nagaraj P, Abubakar K, <u>Keszler M</u>. Does Vigorous Bubble CPAP Enhance Carbon Dioxide Elimination Compared to Gentle Bubble CPAP? PAS meeting Vancouver, BC, CA, May 2010. E-PAS20104407.299.
- 113. Keszler P, Nagaraj P, Abubakar K, <u>Keszler M</u>. What Is the Minimum Expiratory Flow Rate That Avoids Re-Breathing of CO<sub>2</sub>? PAS meeting Vancouver, BC, CA, May 2010. E-PAS20104407.309.

- 114. Vossoughi J, Majd S, Johnson A, Rostami N, Kunos I, <u>Keszler M.</u> Feasibility of Evaluatin Respiratory Resistance in Infants. 26th Southern Biomedical Engineering Conference, College Park, MD, May 2010.
- 115. Sharma S, Clark S, Abubakar KM, <u>Keszler M.</u> Tidal Volume Needed for Normocapnia in Infants with Meconium Aspiration Syndrome. Eastern Society for Pediatric Research Meeting, Philadelphia, PA, March 2011.
- 116. Rostami N, Bautista MV, Johnson A, Vossoughi J, Majd S, <u>Keszler M</u>. Noninvasive Measurement of Airway Resistance in Young Children. PAS meeting, Denver, CO, May 2011, E-PAS20113838.397.
- 117. <u>Keszler M</u>. Volume Guarantee Ventilation During PDA Ligation. PAS meeting, Denver, CO, May 2011. E-PAS20114530.436.
- 118. Scala M, Berg J, <u>Keszler M</u>, Abubakar KM. Premature Infants Conceived via Artificial Reproductive Technology (ART) Are More Immature Than Naturally Conceived (NC) Infants of Similar Gestational Age, PAS meeting , Denver, CO, May 2011, E PAS20112917.244.
- 118. Vossoughi J, Johnson A, Bautista M, Rostami N, Fisher-Tripodi R, <u>Keszler M.</u> Evaluation of the Respiratory Resistance Value for Children. 27th Southern Biomedical Engineering Conference, Arlington, Tx, May 2011.
- 119. Bautista MV, Rostami N, Fischer-Tripodi R, <u>Keszler M</u>, Johnson A, Vossoughi J. Noninvasive Measurement of Airway Resistance on Healthy Children and Children with Stable Asthma. ATS meeting Denver, CO, May 2011. Am. J. Respir. Crit. Care Med., May 2011; 183: A6310.
- 120. Chmura K, Mazela J, Henderson C, Gregory TJ, <u>Keszler M</u>, Gadzinowski J. Nitric Oxide Delivery with a Novel Ventilator Circuit Connector an In Vitro Study Under Neonatal Ventilatory Conditions. Hot Topics in Neonatology conference, December 2011, Washington, D.C.
- 121. Mazela J, Chmura K, Kulza M, Florek E, Gregory TJ, Henderson, <u>Keszler M.</u> Calculated Inhaled Albuterol Dose and Delivered Albuterol Dose during Simulated Infant Ventilation Using a Novel Ventilator Circuit Connector. PAS meeting, Boston, MA May 2012; 4522.237.
- 122. <u>Keszler M</u>, Arnon S, Beuchee A, Bental YA, Cox C. Predictive Value of Serum Lactate in Necrotizing Enterocolitis (NEC) Patients. PAS meeting, Boston, MA May 2012;4529.493.
- 123. Murphy T, Mirza H, Daigle K, Ziegler J, Stonestreet B, <u>Keszler M</u>, Laptook A, Padbury J. Multidisciplinary Approach to Inpatient Management and Transition Home for Infants with Severe Bronchopulmonary Dysplasia. New England Neonatology Quality and Safety Forum, Marlborough, MA, September 2012.
- 124. Mazela J, Chmura K, Henderson C, Gregory TJ, <u>Keszler M</u>, Gadzinowski J. Nitric Oxide Delivery with a Novel Ventilator Circuit Connector an In Vitro Study Under Neonatal Ventilatory

Conditions. 4<sup>th</sup> Congress of the European Academy of Pediatric Societies, October 2012, Istanbul, Turkey.

- 125. Mazela J, Chmura K, Kulza M, Florek E, Gregory TJ, Henderson, <u>Keszler M.</u> Calculated Inhaled Albuterol Dose and Delivered Albuterol Dose during Simulated Infant Ventilation Using a Novel Ventilator Circuit Connector. 4<sup>th</sup> Congress of the European Academy of Pediatric Societies, October 2012, Istanbul, Turkey.
- 126. Rostami N, Bautista M, Johnson A, Vossoughi J, <u>Keszler M</u>. Pre and Post Bronchodilator Airway Resistance Values in Children with Asthma Using the Airflow Perturbation Device (APD). 4<sup>th</sup> Congress of the European Academy of Pediatric Societies, October 2012, Istanbul, Turkey.
- 127. Rostami N, Bautista MV, Johnson A, Vossoughi J, <u>Keszler M</u>. Pre and Post Bronchodilator Airway Resistance Values in Children with Asthma Using Airflow Perturbation Device. Pediatric Academic Societies in Washington, DC, May 2013.

# SCHOLARLY WORK PUBLISHED IN OTHER MEDIA

- 1. Siva Subramanian KN, McCullough L, <u>Keszler M</u>, et al: Ethics Committee Sociodrama. Educational videotape. Extended European Bioethics Course, June 1988.
- 2. Pellegrini E, Siva Subramanian KN, <u>Keszler M</u>, et al: Neonatal Ethics Committee. Network for Medical Education, Educational videotape. April 1991.
- 3. Clinical Guidelines and Observations on Babylog 8000 plus with PSV and VG. Educational booklet. 1999, Draeger Medizintechnik, Lubeck, Germany.
- 4. Keszler M. Clinical Guidelines for the Use of Volume Guarantee: Practice Guidelines for the Bedside. *Clinics in Perinatology*. 2007;34(1):116e1-116e4.

# **INVITED PRESENTATIONS**

## **Visiting Professorships**

- 1. Children's Hospital Medical Center of Akron, Department of Neonatology. March 1990:
  - Grand Rounds, "High frequency ventilation 1990".
  - Resident Lecture, "Diagnosis and treatment of persistent pulmonary hypertension of the newborn".
- 2. Children's Hospital of the King's Daughters, Norfolk, VA, November 1990:
  - Neonatology Grand Rounds, "Extracorporeal Membrane Oxygenation 1990 and beyond".
- 3. Research Institute, Care of Mother & Child, Charles University, Prague, Czech Republic. June 1991.
  - Lecture, "Clinical and research experience with high frequency jet ventilation in the USA".
- 4. Second Perinatal Clinic, Charles University, Prague, Czech Republic, June 1991:
  - Lecture, "Extracorporeal membrane oxygenation for the treatment of refractory respiratory failure in the newborn".
- 5. The University Hospital Motol, Charles University, Prague, Czech Republic, June 1991,
  - Lecture, "Extracorporeal membrane oxygenation: Why, when, and how".
- 6. Second Perinatal Clinic, Charles University, Prague, Czech Republic, October 1995:
  - Lecture, "The role of Extracorporeal membrane oxygenation and Nitric Oxide in the treatment of PPHN".
- 7. Women's College Hospital & Toronto Sick Children's Hospital, University of Toronto, Canada, March 1997:
  - Neonatology Academic Day Lecture, "High-frequency jet ventilation and cerebral injury-Lessons from the collaborative HFJV in RDS study".

- 8. Uniformed Services University of the Health Sciences, Bethesda, MD, May 21, 1997:
  - Academic Day Lecture, "Recent developments in High-frequency ventilation-Lessons from the collaborative HFJV in RDS study".
- 9. K.K. Women's and Children's Hospital, Singapore, June 29, 1998:
  - Lecture, "New developments in conventional ventilation of infants".

10. University of Rochester, Children's Hospital at Strong Memorial Hospital, July 29, 1998.

• Lecture Series and Case Discussion, "Extracorporeal membrane oxygenation: indications, contraindications, management and outcome".

11. University of Toronto, Canada, June 2000.

- Neonatology Academic Half-day Lecture, "Lung-protective strategies in neonatal mechanical ventilation".
- Respiratory Therapy Dept Lecture, Toronto Sick Children's Hospital, "Theory and application of new ventilatory modalities in the NICU".
- Respiratory Therapists Lecture, Mount Sinai Hospital, "New ventilatory modalities in the NICU: synchronized ventilation and HFV".
- Lecture, Women's College Hospital, "Clinical case studies of pressure support/volume guarantee in neonates".
- 12. University of the United Arab Emirates Al, Ain, Al Ain, United Arab Emirates, October 2000.
  - Faculty of Medicine Lecture, "Nitric oxide–Current practice in the USA".
  - Faculty of Medicine Lecture, "Advances in high-frequency ventilation".
- 13. The Perinatal Center of First Faculty of Medicine, Charles University, Prague, Czech Republic, November 2000.
  - Lecture and Discussion, "Volume guarantee and pressure support ventilation in acute and chronic lung diseases in newborn infants".
  - Lecture and Discussion, "Surfactant lavage for severe meconium aspiration syndrome".
- 14. The University of Helsinki Medical Center (Prof. Vinepa Fellman) Helsinki, Finland, October 2001.
  - NICU Rounds and Lecture, "Advanced modes of synchronized conventional ventilation and the role of volume targeted ventilation in the prevention of lung injury".
- 15. Ulleval University Hospital, (Professor Rolf Lindemann) Oslo, Norway, October 2001.
  - NICU Rounds and Lecture, "Advanced modes of synchronized conventional ventilation and the role of volume targeted ventilation in the prevention of lung injury".
- 16. Schneider Children's Hospital (University of Tel Aviv), Tel Aviv, Israel. February 2002.
  - Ward Rounds, Case Presentations and Discussion.
- 17. Shaare Zedek Medical Center, Jerusalem, Israel, February 2002.
  - Ward Rounds, Case Presentations and Discussion.

Lecture: "The role of advanced synchronized mechanical ventilation modes in the prevention of lung injury".

18. University of South Florida, Tampa, FL, October 2005.

- Ward Rounds and Case Presentations.
- Discussion of Fellow's Current Research Projects
- Pediatric Grand Rounds: "Modern Conventional Ventilation. How to avoid injuring the baby you seek to save".
- Neonatal Fellow Lectureship, 12<sup>th</sup> Annual John Curran MD

19. University of Innsbruck, Innsbruck, Austria, January-February 2006 (three weeks).

- Daily Ward Rounds, Teaching Rounds.
- Total of ten lectures on a variety of respiratory topics
- Animal laboratory research participation

20. King Faisal National Guard Specialist Hospital and Research Center, Jeddah, Saudi Arabia, November 2006

- Ward Rounds
- Faculty & House-staff Question & Answer Session: Modalities of respiratory support in newborn
- 21. King Fahd Ministry of Health Hospital, Jeddah, Saudi Arabia, November 2006
  - Ward Rounds
  - Senior Staff Informal Discussion on a range of subjects in the care of high-risk neonates
- 22. Women & Infants Hospital, Brown University, Providence, RI, May 2007
  - MFM, Pediatric Surgery & Neonatology Current Concepts in the Management of Congenital Diaphragmatic Hernia
  - Review of current research by Fellows and Junior Faculty
  - Informal Question and Answer Session with Neonatology Fellows
  - Ward Rounds and Case Presentation
  - Pediatric Research Colloquium presentation
- 23. Singaporean Ministry of Health "Health Manpower Development Plan" K.K. Women's and Children's Hospital, National University Hospital and Singapore General Hospital, Singapore, January 4-10 2009.
  - Daily Ward Rounds
  - Round Table Discussions
  - Discussion on starting ECMO program at KK Women's and Children's Hospital
  - Presentation of Research Projects by Registrars and Associate Consultants
  - Hands on Demo of Ventilators and Pulmonary Graphics Daily Lectures:

The Golden First Hour after Birth Expanded Use of Nitric Oxide in Term and Preterm Infants Update on Volume Guarantee Ventilation Update on High Frequency Ventilation Pressure Support and Volume Guarantee Ventilation- Do they make a difference? Congenital Diaphragmatic Hernia: Contemporary Management and Outcome Surfactant Use in the Treatment of Term Infants with Severe Respiratory Failure Oxygen Therapy: How Much is Enough and Safe Pulmonary Graphics Monitoring: Usefulness and Limitations

- 24. Neonatology, Janeway Children's Hospital, Memorial University of Newfoundland, St. John's, Newfoundland. May 2010
  - Ward Rounds
  - Resident Academic Half Day, "Respiratory Physiology Board Review and Quiz"
  - Pediatric Grand Rounds, "Advances in Mechanical Ventilation: How to Avoid Physician Induced Lung Injury"
- 25. First Obstetrical-Gynecological Clinic/Neonatology Division, Charles University, Nov 25-29, Prague, Czech Republic.
  - Ward Rounds
  - Case Presentations
  - Participation in the Care of the ELBW infant postgraduate course

## Panel Discussions, Workshops and Conference Participation as Moderator or Invited Participant

- 1. Moderator, Workshop on ECMO Patient Management, 7th Annual Spring Workshop, Advanced Session, Ann Arbor, MI, April 1988.
- 2. Panel Discussion, Veno-venous Extracorporeal Membrane Oxygenation, Fifth Annual Conference on Neonatal ECMO, Snowmass CO, February 1989.
- 3. Invited participant, NIH Workshop on Diffusion of ECMO Technology, May 1990, Washington, D.C.
- 4. Panel Discussion, "Current trends in management and care of the infant/pediatric patient with circulatory defects". Annual Academy Meeting of the American Academy of Cardiovascular Perfusion, September 1990, Chicago, IL.
- VV ECMO Panel, "Tidal flow veno-venous ECMO vs. continuous flow double lumen venovenous ECMO", 7th Annual Children's Hospital National Medical Center ECMO Symposium, February 1991, Breckenridge, CO.
- 6. Panel Discussion, "Matching jet ventilation strategies to specific pathophysiologies", 8th Annual Conference on High Frequency Ventilation of Infants, April 1991, Snowbird, UT.
- 7. Panel Discussion Chair, "Common clinical problems during ECMO", Pediatric ECMO, Basic course, Extracorporeal Life Support Organization, September 1991, Ann Arbor, MI.

- 8. Panel Discussion, Confessions of an ECMO team, 4th Annual Extra-corporeal Life Support Organization Meeting, October 1992, Detroit, MI.
- 9. Moderator, Discussion of Poster Session Papers. 4th Annual Extracorporeal Life Support Organization Meeting, October 1992, Detroit, MI.
- 10. Panel Discussion, Tough questions, tough decisions: Ethical considerations. West-East Chesapeake Association of Neonatal Nurses Fall Meeting, November 1992, Baltimore, MD.
- 11. Roundtable Leader, ECMO for Neonatal Respiratory Failure, 5th Annual Extracorporeal Life Support Organization Conference, Dearborn, Michigan, October 1993.
- 12. Invited participant, NIH Workshop on Nitric oxide, December 1993, Washington, D.C.
- 13. Moderator, Breakout Session, Nuts and bolts of neonatal ECMO, Tenth Annual Children's Hospital National Medical Center ECMO Symposium, February 1994, Keystone, CO.
- 14. HFV- Situation today, ideas toward the future. Roundtable, High Frequency Ventilation Workshop sponsored by Draeger Ballings, Brussels, Belgium, September 1994.
- 15. Moderator, Breakout Session, Neonatal ECMO case presentations, 11th Annual Children's Hospital National Medical Center ECMO Symposium, February 1995, Keystone, CO.
- 16. Moderator and Featured Speaker, Unconventional means of gas exchange in neonates. Czech Neonatological Society Annual Meeting, Kladno, Czech Republic, October 1995.
- 17. Pressure support ventilation. Draeger Workshop on Patient triggered ventilation: New Software Developments. Chantilly, VA, November 1995.
- 18. Extracorporeal Membrane Oxygenation. Panel Discussion: The patient speaks. Fifth Annual Event of the American Institute of Medical and Biological Engineering: The Impact of Bioengineering and Medical Technology on the Quality of Life. March 1996, Washington DC.
- 19. HFJV in infants with RDS: The strategy makes a difference. Bunnell Workshop, 13th Annual Conference on High Frequency Ventilation of Infants, Snowbird, UT, March 1996.
- 20. Moderator, 12<sup>th</sup> Mid-Atlantic Conference on Perinatal Research. Irvington, VA, October 1996.
- 21. Moderator, 22<sup>nd</sup> Mid-Atlantic Conference on Perinatal Research. Irvington, VA, October 1998.
- 22. The Great Debate: High-frequency ventilation as the initial mode of ventilation for infants with uncomplicated RDS. Neonatal Advanced Practice Nursing Forum 2001, Washington, DC, May 2001.
- 23. Panel Discussion, Advances in mechanical ventilatory support. Annual meeting of the Norwegian Pediatric Association, Tromso, Norway, October 2001.

- 24. Panel Discussion, Current and creative strategies for treating and preventing BPD, 13<sup>th</sup> Annual Conference of High Frequency Ventilation and Other Advances in Perinatal/Neonatal Care, Tempe, Arizona, November 2001.
- 25. Panel Discussion, What is the current role of HFV in the treatment of respiratory failure in newborns and infants? IPOKRaTES International Clinical Seminar on High-Frequency Ventilation, Prague, Czech Republic, March 2002.
- 26. Invited Participant, AAP-NICHD Workshop on Research in Neonatology, Rockville, Maryland, January 2004
- 27. Panel Session: Ask the Professors, Neonatal Update Meeting, The Royal Women's Hospital, Melbourne, Australia March 2004.
- 28. Moderator, Poster Session I: Neonatal respiratory support and outcome, 7<sup>th</sup> European Conference on Neonatal and Pediatric Ventilation, Montreux, Switzerland, March 2004.
- 29. Moderator, 28<sup>th</sup> Mid-Atlantic Conference on Perinatal Research, Charlottesville, VA, October 2004.
- 30. Impact of ET tubes, ventilators and ventilator strategies on work of breathing. Workshop on Advances in Neonatal Respiratory Care, Key Biscayne, FL, November 2004.
- 31. New Modalities of Mechanical Ventilation. Hands on demonstration and discussion. Workshop on Advances in Neonatal Respiratory Care, Key Biscayne, FL, November 2004.
- 32. Poster Session Facilitator, Poster Session III, PAS Annual Meeting Washington, DC, May 2005.
- 33. Panel Discussion: What is the current role of HFV in the treatment of respiratory failure in newborns and infants? IPOKRaTES clinical seminar: High-Frequency Ventilation and Other Advanced Ventilatory Strategies in Newborn Infants. May 2005, Erlangen, Germany.
- 34. Ventilation Workshop: Cases From the Files. 8th Annual Neonatal Advanced Practice Nursing Forum, Washington, DC, June 2005.
- 35. Non-invasive ventilation in tiny infants. Workshop, XXth European Congress of Perinatal Medicine, Prague, Czech Republic, May 2006.
- 36. Ventilation Workshop. Hands-on demonstration and discussion using live surfactant lavaged animal model. 4<sup>th</sup> International Symposium "El Pulmon del Recien Nacido" (The lung of the newly born).Buenos Aires, Argentina, June 2006.
- 37. Meet the Experts Workshop: Neonatal mechanical ventilation. Practical session on newer modes of mechanical ventilation, Saudi Pediatric Association 3<sup>rd</sup> International Conference on Child Health, Jeddah, Saudi Arabia November 2006.

- Special Modes of Ventilation Workshop: Demonstration on Ventilators and Lung Models. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support. Istanbul Turkey, February 2007.
- 39. Inhaled Nitric Oxide Workshop Leader. When to start, whom to treat, interaction on iNO and HFV. First International Neonatal Respiratory Symposium, Doha, Qatar, March 2007.
- 40. Roundtable Discussion Moderator: New Modes of Mechanical Ventilation. Jornada Internacional de Neonatologia, Hospital Universitaire "La FE", Valencia, Spain, June 2007.
- 41. Roundtable Discussion Participant: Persistent Pulmonary Hypertension. Jornada Internacional de Neonatologia, Hospital Universitaire "La FE", Valencia, Spain, June 2007.
- 42. Roundtable Discussion Participant: Bronchopulmonary Dysplasia. Jornada Internacional de Neonatologia, Hospital Universitaire "La FE", Valencia, Spain, June 2007.
- 43. Special modes of ventilation: Demonstration on ventilators and lung model. Resuscitation, Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, Porto, Portugal, September 2007.
- 44. Co-Chair of PAS Hot Topic, Innovative Ventilation for Infants: From Hi Tech to Non-Invasive Respiratory Support. PAS annual meeting, Honolulu, Hawaii, May 2008.
- 45. Resuscitation Workshop: One of four invited experts to identify optimal equipment needs for new generation of Neonatal workstations. Draeger Inc., Telford PA, June 2008.
- 46. Hands-on Demonstration, Babylog Ventilator and Volume Guarantee. King Khalid Medical City, Riyadh, Saudi Arabia, September 2008.
- 47. Hands-on Demonstration, Babylog Ventilator and Volume Guarantee. King Faisal National Guard Specialist Hospital and Research Center, Jeddah, Saudi Arabia, September 2008.
- 48. Hands-on Demonstration, Babylog Ventilator and Volume Guarantee. Saint Josephs Hospital, Denver, CO, September 2008.
- 49. Invited presenter, Technological innovations for optimizing neonatal pulmonary care, NICHD Workshop: Safe and Effective Devices for use in the NICU. NICHD, Bethesda, MD, February 2009.
- 50. Invited presenter, Metabolic monitoring: glucose, lactate, and electrolytes, NICHD workshop: Safe and Effective Devices for use in the NICU. NICHD, Bethesda, MD, February 2009.
- 51. Platform Session Moderator, Bronchopulmonary Dysplasia: Research Results. Pediatric Academic Societies Original Science Abstracts, Baltimore MD, May 2009.

- 52. Neonatal Specialty Review Course, Pulmonary Problem Solving Workshop and Tutorial, Orlando, FL, February 2010.
- 53. Moderator, Platform Presentation Session, Neonatal Patient-Oriented Research VI. Pediatric Academic Societies Original Science Abstracts. Vancouver, Canada, May 2010.
- 54. Pulmonary Problem Solving Workshop and Tutorial. Neonatal Specialty Review Course. Orlando, Fl, February 2011.
- 55. Two three-hour Respiratory Workshops: Introduction; Practical Approach to Pulmonary Graphics at the Bedside; Real Life Case Scenarios interactive; Question period. 11<sup>th</sup> Annual meeting of the Saudi Neonatology Society, Riyadh, Saudi Arabia April 2011.
- 56. Activity Chair and Expert Panel Moderator, Inhaled Nitric Oxide in the Neonate: Current Role and Future Opportunities. Satellite Symposium, Hot Topics in Neonatology, Washington, DC December 2011.
- 57. Platform Session Moderator, Neonatal Clinical Trials II. Pediatric Academic Societies Original Science Abstracts, Boston, MA, April 2012
- 58. Pulmonary Problem Solving Workshop and Tutorial. Specialty in Review in Neonatology/ Perinatology 2.0. Orlando, Fl, February 2012.
- 59. State of the Art in Neonatal Ventilation. Clinical management review and hands-on demonstration of Babylog VN 500. Special workshop in conjunction with IPOKRaTES seminar, KK Women's Hospital, Singapore, August 2012.
- 60. Interactive Ventilation Session. Mechanical Ventilation and BPD Symposium, Royal Prince Alfred Hospital, University of Sydney, Sydney, NSW, Australia, August 2012.
- 61. Practical problem solving in Volume targeted ventilation, Royal Women's Hospital, Melbourne, Victoria, Australia, August 2012.
- 62. Roundtable Discussion, Pulmonary Hypertension. Congreso Latino Americano de Pediatria ALAPE 2012 in Quito, Ecuador, November 2012.
- 63. Pulmonary Problem Solving Workshop and Tutorial. Specialty in Review in Neonatology/ Perinatology, Orlando, Fl, February 2013.
- 64. The DR Recruit Trial Research Protocol. 3<sup>rd</sup> Neonatal Resuscitation Research Workshop, Bethesda, MD, April 2013.
- 65. Volume Guarantee Ventilation 3 hour workshop. Neonatus 2013 conference, Poznan University of Medical Sciences, Poznan, Poland, May 2013.

# **Regional Lectures**

- 1. Pseudohypoaldosteronism in a premature infant. Pediatric Grand Rounds, Georgetown University Medical Center, October 1982, Washington, D.C.
- 2. The problems of the Infant of a Diabetic Mother, Perinatal Neonatal Grand Rounds, Greater Southeast Community Hospital, October 1983, Washington, D.C.
- 3. High-frequency jet ventilation. Neonatal/Perinatal rounds, The Washington Hospital Center, September 1984, Washington, D.C.
- 4. Extracorporeal membrane oxygenation. Pediatric Grand Rounds, Georgetown University Medical Center, November 1984, Washington, D.C.
- 5. Extracorporeal membrane oxygenation. Ob-Gyn Grand Rounds, Georgetown University Medical Center, February 1985, Washington, D.C.
- 6. High-frequency jet ventilation. Neonatology Grand Rounds, Children's Hospital National Medical Center, October 1985, Washington, D.C.
- 7. Extracorporeal membrane oxygenation update. Pediatric Grand Rounds, Georgetown University Medical Center, February 1986, Washington, D.C.
- 8. An update on high-frequency jet ventilation. Perinatal Neonatal/perinatal rounds, The Washington Hospital Center, July 1986, Washington, D.C.
- 9. Extracorporeal membrane oxygenation (ECMO): An exciting new technology for critically ill newborns. American Heart Association Seminar: Cardiac issues throughout the life cycle, April 1986, Washington, D.C.
- 10. Extracorporeal membrane oxygenation: Current applications and future trends. National Association for Neonatal Nurses Conference, July 1986, Baltimore, MD.
- 11. Premature Rupture of Membranes and Prematurity. Guest speaker at the Perinatal Committee lecture series, Greater Southeast Community Hospital, May 1987, Washington, D.C.
- 12. Extracorporeal membrane oxygenation Recent developments. Pediatric Grand Rounds, Georgetown University Medical Center, August 1987, Washington, D.C.
- 13. What is new in high-frequency jet ventilation? Neonatology grand rounds, Children's Hospital National Medical Center, September 1987, Washington, D.C.
- 14. Respiratory distress in the Newborn. Nursing in the neonatal setting: The complexities of care. Greater Southeast Community Hospital, June 1988, Washington, D.C.

- 15. Complications of mechanical ventilation. Greater Southeast Community Hospital, June 1988, Washington, D.C.
- 16. Extracorporeal membrane oxygenation: Past, Present and Future. Pennsylvania Society for Respiratory Care Annual Conference, May 1989. Valley Forge, PA.
- 17. High-frequency ventilation, 1989. Pediatric Grand Rounds, Georgetown University Medical Center, May 1989, Washington, D.C.
- 18. High-frequency ventilation: current status and future trends. Neonatology Rounds, Armed Services University, School of Medicine, June 1989, Washington, D.C.
- 19. Treatment of congenital diaphragmatic hernia. Anesthesia Grand Rounds, Georgetown University Medical Center, June 1989, Washington, D.C.
- 20. Extracorporeal membrane oxygenation. Perinatal Day 1990. American Academy of Pediatrics, Maryland Chapter Annual Perinatal Day Conference, March 1990, Baltimore, MD.
- 21. High-frequency ventilation current status. Neonatal conference, Columbia Hospital for Women, June 1990, Washington D.C.
- 22. Extracorporeal membrane oxygenation: Current indications, applications, and outcomes in neonates. Main Line Health Pulmonary conference, September 1990, Philadelphia, PA.
- 23. Extracorporeal membrane oxygenation: Current applications and future trends. Maryland/D.C. chapter of the American Association for Respiratory Care "1990 Respiratory Conference by the Sea" September 1990, Ocean City, MD.
- 24. What is new in High-frequency ventilation. Neonatal/perinatal rounds Washington Hospital Center, February 1991, Washington, D.C.
- 25. High-frequency jet ventilation: Past, present & future. Washington Area Neonatology Association meeting, March 1991, Washington, D.C.
- 26. High-frequency jet ventilation. Pediatric grand rounds, Uniformed Services University School of Medicine, April 1991, Bethesda, MD.
- 27. High-frequency jet ventilation in the treatment of pulmonary interstitial emphysema. First Annual East Coast High Frequency Jet ventilation conference, June 1991, DuPont Institute, Wilmington, DE.
- 28. High-frequency jet ventilation in the newborn. Review of recent literature. Pediatric Journal club, Respiratory care department, NIH, June 1991, Bethesda, MD.

- 29. High-frequency ventilation: The national experience. Guest Faculty Lecture, First Regional Washington Area Fellow Research Seminar, George Washington University, September 1991, Washington, D.C.
- 30. Update on high frequency ventilation in the newborn: Neonatal/perinatal rounds. December 1991, Washington Hospital Center, Washington, D.C.
- 31. New developments in Neonatal ECMO. Neonatology conference, Columbia Hospital for Women, September 1992, Washington D.C.
- 32. The role of high-frequency ventilation in the respiratory care of newborns. Pediatric Conference, March 1993, D.C. General Hospital, Washington, D.C.
- 33. New technologies in Neonatology: High-frequency ventilation, ECMO and Nitric Oxide. Future Generations: Advances in Perinatal and Neonatal Medicine. Science Writers' Forum. Georgetown University, September 1993, Washington, D.C.
- 34. Congenital diaphragmatic hernia and ECMO. Hospital for Sick Children Washington, D.C. September 1993, Washington, D.C.
- 35. New techniques of conventional mechanical ventilation. Neonatology Grand Rounds, March 1995, Holy Cross Hospital, Silver Spring MD.
- 36. Space-age technologies in the NICU. Regional conference on The High Risk Newborn: From stone age to space age. October 1995, Georgetown University, Washington DC.
- 37. High-frequency jet and oscillatory ventilation clinical applications. Neonatology Conference, September 1996, Holy Cross Hospital, Silver Spring MD.
- 38. Recent developments in the treatment of PPHN. Neonatal/Perinatal rounds Washington Hospital Center, June 1997, Washington, D.C.
- 39. Update on neonatal ventilatory support. Neonatal/Perinatal rounds Washington Hospital Center, June 1997, Washington, D.C.
- 40. High-frequency ventilation/Airleak syndrome. Sibley Hospital, November 1997, Washington, DC.
- 41. High-frequency oscillatory ventilation clinical management. Neonatology conference, Columbia Hospital for Women, December 1997, Washington D.C.
- 42. Meconium Aspiration Syndrome. Joint Pediatric / OB-GYN CME conference, Prince George's Hospital Center, January 1998, Cheverly, MD.
- 43. Optimizing high-frequency jet ventilation. Neonatology conference, Holy Cross Hospital, March 1998 Silver Spring MD.

- 44. Advanced ventilatory techniques in neonates. Neonatal Workshop, Arlington Hospital, March 1998, Arlington, VA.
- 45. New technologies in Neonatology. Pediatric Grand Rounds, Alexandria Hospital, March 1998, Alexandria, VA.
- 46. Inhaled Nitric Oxide for the treatment of PPHN. Neonatal/Perinatal rounds, Washington Hospital Center, April 1998, Washington, D.C.
- 47. High-frequency ventilation and other newer technologies in Neonatal respiratory support. Pediatric Grand Rounds Georgetown University, April 1998, Washington, D.C.
- 48. Advanced techniques in conventional mechanical ventilation in neonates. Neonatal Workshop, Arlington Hospital, March 1999, Arlington, VA.
- 49. Nitric oxide and its role in the treatment of PPHN. Pediatric Grand Rounds Georgetown University, February 2000, Washington, D.C.
- 50. Nitric Oxide in the treatment of newborns with hypoxemic respiratory failure. Neonatology Grand Rounds, May 2000, Holy Cross Hospital, Silver Spring, MD.
- 51. Congenital Diaphragmatic Hernia: the Neonatology Perspective. 14th Annual Pediatric/Pediatric Surgery Symposium. June 2000, Uniformed Services University of the Health Sciences, Bethesda, MD.
- 52. Surfactant use in neonatal RDS Does Infasurf offer any advantages? Neonatology Grand Rounds, November 2000, Holy Cross Hospital, Silver Spring, MD.
- 53. Advanced techniques of conventional neonatal ventilation. Neonatal Advanced Practice Nursing Forum 2001, May 2001, Washington, DC.
- 54. Inhaled Nitric Oxide in Term and Preterm Infants. Neonatal Conference, Innova Alexandria Hospital, June 2003, Alexandria, VA.
- 55. Pathophysiology and treatment of congenital diaphragmatic hernia. Perinatal Grand Rounds, October 2003, York Hospital, York, Pennsylvania.
- 56. Volume targeted ventilation. Neonatology Seminar, Uniformed Services University of the Health Sciences, November 2003, Bethesda, MD.
- 57. Ventilator strategies for the prevention of ventilator-induced lung injury. South Central Pennsylvania Neonatology Association Annual dinner meeting and lecture, October 2003, York, Pennsylvania.
- 58. Advanced Modes of Conventional Ventilation and Avoidance of Ventilator-induced Lung Injury. Neonatal conference, Washington Hospital Center, May 2005, Washington, DC.

- 59. Volume-targeted Ventilation. Virginia Society for Respiratory Care Annual meeting, July 2005, Charlottesville, VA.
- 60. Expanded use of Inhaled Nitric Oxide in term and preterm newborn infants. Holy Cross Hospital, May 2006, Silver Spring, MD.
- 61. Inhaled Nitric Oxide for Treatment of Persistent Pulmonary Hypertension of the Newborn. Current Perspectives on Neonatal Care 2006, May 2006, Winchester, VA.
- 62. Modern Conventional Ventilation: How to Avoid Injuring the Baby you Seek to Save. Eighth Annual Collaborative Neonatal Conference: "New Concepts in Neonatal Intensive Care" New York University Post-Graduate Medical School, September 2006, New York, NY.
- 63. Chronic Lung Disease in Newborn Infants: What is it? Can we prevent it? Annual Respiratory Care Conference, October 2006, Georgetown University, Washington DC.
- 64. High-Frequency Ventilation in the Newborn infant update. Monthly Neonatal CME Conference, Washington Hospital Center, December 2006, Washington, DC.
- 65. Advances in Conventional Mechanical Ventilation: How do we Avoid Physician-Induced Lung Injury? Children's National Medical Center Lecture for Neonatology Fellows and Staff, June 2008, Washington DC.
- 66. Non-Invasive Respiratory Support: Less is Better. 8<sup>th</sup> National Neonatal Nurses Meeting sponsored by the Neonatal Network and the Academy of Neonatal Nursing, Washington, DC, October 2008.
- 67. State of the Art in Mechanical Ventilation. 8<sup>th</sup> National Neonatal Nurses Meeting sponsored by the Neonatal Network and the Academy of Neonatal Nursing, Washington, DC, October 2008.
- 68. Modern Conventional Ventilation: How not to injure the lungs of the baby you are trying to save. Fellow's conference, Penn State University School of Medicine, Hershey Medical Center, Hershey, PA January 2009.
- 69. Update on Inhaled Nitric Oxide Therapy For Hypoxemic Respiratory Failure. Neonatology/ Respiratory Conference, St. Joseph's Hospital, Baltimore, MD July 2009.
- 70. Inhaled Nitric Oxide Therapy in Term and Late Preterm Infants with Hypoxemic Respiratory Failure. Henrico Doctor's Hospital, Richmond, VA, November 2009.
- 71. Inhaled Nitric Oxide Therapy in Term and Late Preterm Infants with Hypoxemic Respiratory Failure. Winchester Memorial Hospital, Winchester, VA, November 2009.
- 72. State of the Art in Neonatal Respiratory Support. Pediatric Research Colloquium. Women's and Infants' Hospital, Brown University, Providence, RI. January 2010.

- 73. Inhaled Nitric Oxide for Treatment of Hypoxemic Respiratory Failure. Mary Washington Hospital, Fredericksburg, VA February 2010.
- 74. Inhaled Nitric Oxide for Hypoxemic Respiratory Failure. Holy Cross Hospital, Silver Spring, MD March 2010.
- 75. Treatment of Hypoxemic Respiratory Failure. St. Mary's Hospital. Richmond, VA, April 2010.
- 76. Treatment of Hypoxemic Respiratory Failure with Inhaled Nitric Oxide. New Hanover Regional Medical Center, Wilmington, NC, May 2010.
- 77. Inhaled Nitric Oxide for Treatment of Hypoxemic Respiratory Failure. Pitt County Memorial Hospital, Greenville, NC, May 2010.
- 78. Non-invasive Respiratory Support. Blue Ridge Symposium First Annual Neonatal/Pediatric Conference, Winchester, VA May 2010.
- 79. Lung-Protective Ventilation Strategies. Blue Ridge Symposium First Annual Neonatal/Pediatric Conference, Winchester, VA May 2010.
- 80. Oxygen Therapy: The Good, The Bad and The Ugly. Blue Ridge Symposium First Annual Neonatal/Pediatric Conference, Winchester, VA May 2010.
- 81. Inhaled Nitric Oxide in the Term and Premature Newborn. Visiting Lecturer Series in Perinatal Pediatrics, Washington Hospital Center, Washington DC, June 2010.
- 82. Mechanical Ventilation: "Old School vs New School" Which is Better? Suncoast Pulmonary Symposium, Fort Myers, FL, September 2010.
- 83. Neonatal Ventilation: High Frequency, Low Frequency or No Frequency. Sixth Annual Advances in Neonatology Conference, Children's Hospital of Philadelphia, Philadelphia, PA Oct. 2010.
- 84. Volume-Targeted Ventilation in Neonatal Respiratory Support. Brown Pulmonary Research Seminar, Rhode Island Hospital, Providence, RI, March 2011.
- 85. Primum Non Nocere: Lung-Protective Strategies of Respiratory Support. Neonatal- Perinatal Medicine Featured Speaker, New England Perinatal Society Annual Meeting, Newport, RI, March 2011.
- 86. Mechanical Ventilation in the Newborn Infant: Old School vs. New School Approaches. Rhode Island Society for Respiratory Care annual meeting, Newport, RI, March 2011.
- 87. What Would You Do? Management of the 30 Week Preterm Infant: Early respiratory management. NeoFest 2011, Cincinnati Children's Hospital, Cincinnati, OH, March 2011.

- 88. Hypoxemic Respiratory Failure in Extremely Preterm Neonates. 6th Annual New York Hospital Queens, Department of Pediatrics Neonatal Symposium. New York, NY, May 2011.
- 89. Primum non-nocere: How to avoid physician- induced lung injury. Neonatal Grand Rounds, Tufts University, Boston, MA, September 2011.
- 90. Lung-protective Strategies of Mechanical Ventilation. Greater Baltimore Medical Center, Baltimore, MD October 2011.
- 91. Lung-Protective ventilation strategies: How to avoid physician-induced lung injury? Academic Day for Neonatologists of Southern California (ANOSC) meeting , Children's Hospital of Orange County, CA November 2011.
- 92. Lung Protective Ventilator Strategies. Special CME conference, Main Line Health System, Bryn Mawr, PA March 2012.
- 93. Non-Invasive neonatal Respiratory Support: Alphabet Soup, Part I. Neonatology 2012 Conference. Atlanta, Georgia March 2012.
- 94. Invasive Neonatal Respiratory Support: Alphabet Soup, Part II. Neonatology 2012 Conference, Atlanta, Georgia March 2012.
- 95. Respiratory physiology. Fellows conference, University of Connecticut Health Center, Hartford, CT, April 2012.
- 96. Volume Guarantee Ventilation and Other Lung-Protective Strategies in Neonatal Ventilation. Special lecture, University of Connecticut Health Center, Hartford, CT, April 2012.
- 97. Volume-targeted ventilation. Special CME conference, Women's Hospital of Texas, Houston, TX, May 2012.
- 98. High-frequency ventilation 1012. Regional CME lecture, Houston, TX May 2012.
- 99. Update on volume-targeted ventilation. Neonatology conference, Hermann Memorial Hospital, University of Texas, Houston, TX, May 2012.
- 100. Contemporary Neonatal Ventilation. Neonatal Care Today Conference, Dallas, TX, May 2012.
- 101. Inhaled Nitric Oxide Therapy. Brooklyn-Queens Neonatal Network Meeting, New York, NY, June 2012.
- 102. Volume-targeted Ventilation: New Paradigm in Newborn Ventilation. Neonatal Research Seminar, Massachusetts General Hospital, Harvard University, Boston, MA, March 2013.

103. Ventilation Modes, and the Intubated Newborn: Finding Best Practices in a Sea of Options. New England Neonatology Quality and Safety Forum sponsored by the March of Dimes and the Neonatal Quality Improvement Collaborative of Massachusetts. June 2013, Westborough, MA.

## National:

- 1. Extracorporeal membrane oxygenation in the treatment of refractory respiratory failure. Featured lecture, 7th Annual Conference on High Frequency Ventilation of Infants, April 1990, Snowbird, UT.
- 2. Clinical application of high-frequency jet ventilation. The 15th Annual Symposium, Care of the Sick Newborn, April 1990, Long Beach, CA.
- 3. Treatment of Pulmonary hypertension of the newborn. The 15th Annual Symposium, Care of the Sick Newborn, April 1990, Long Beach, CA.
- 4. Collaborative clinical trial of HFJV in newborns with pulmonary interstitial emphysema. The 15th Annual Symposium, Care of the Sick Newborn, April 1990, Long Beach, CA.
- 5. Extracorporeal membrane oxygenation: Evolution, present status and future directions. Annual Academy Meeting of the American Academy of Cardiovascular Perfusion, Sept. 1990, Chicago, IL.
- 6. Collaborative clinical trial of HFJV in newborns with pulmonary interstitial emphysema. Second Annual High-Frequency Ventilation Conference, November 1990, Phoenix, AZ.
- 7. Airway injury risk and high-frequency ventilation. Second Annual High Frequency Ventilation Conference, November 1990, Phoenix, AZ.
- 8. Matching ventilator strategies to disease pathophysiology. Fourth Annual High-Frequency Ventilation Conference, November 1992, Phoenix, AZ.
- 9. High-frequency jet ventilation in uncomplicated RDS: Clinical Strategies. Fourth Annual High-Frequency Ventilation Conference, November 1992, Phoenix, AZ.
- 10. Alternate therapies for persistent pulmonary hypertension of the newborn. Seventeenth Annual Symposium on Clinical Aspects of Perinatal Medicine. November 1992, Oak Lawn, IL.
- 11. Severe respiratory failure after elective repeat cesarean deliveries. Seventeenth Annual Symposium on Clinical Aspects of Perinatal Medicine. November 1992, Oak Lawn, IL.
- 12. Veno-venous ECMO. Neonatology conference, December 1992, St. Christopher's Hospital for Children, Philadelphia, PA.
- 13. Optimizing ventilator strategies with HFJV. Tenth Conference on High-Frequency Ventilation of Infants, April 1993, Snowbird, UT.

- 14. High-frequency jet ventilation in infants with uncomplicated RDS: The effect of strategy on airway pressures and gas exchange. Fifth Annual High-Frequency Ventilation Conference, November 1993, Phoenix, AZ.
- 15. High-frequency jet ventilation in subjects with low chest wall compliance: Clinical experience and laboratory studies. Fifth Annual High Frequency Ventilation Conference, November 1993, Phoenix, AZ.
- 16. Tailoring conventional and high-frequency ventilation strategy to disease pathophysiology. The 19th Annual Symposium, Care of the Sick Newborn, March 1994, Long Beach, CA.
- 17. Treatment of PPHN in 1994 Hyperventilation, gentle ventilation, HFJV, HFOV, NO, etc. The 19th Annual Symposium, Care of the Sick Newborn, March 1994, Long Beach, CA.
- 18. Ventilator strategies with HFV. Bunnell workshop, 11th Conference on High-Frequency Ventilation of Infants, April 1994, Snowbird, UT.
- 19. Nitric oxide for treatment of respiratory failure in newborns. Tools for Pediatric Ventilation: Where we are and where we're going. Alfred I duPont Institute Continuing Education Series. March 1995, Wilmington, DE.
- 20. HFJV in infants with RDS: Strategy makes a difference. Eighth Annual High Frequency Ventilation Conference, November 1996, Scottsdale, AZ.
- 21. Patient-triggered ventilation. Eighth Annual High Frequency Ventilation Conference, November 1996, Scottsdale, AZ.
- 22. Optimizing ventilator management during Extracorporeal Membrane Oxygenation. The Advanced University of Michigan ECMO course, April 1997, Ann Arbor, MI.
- 23. High-frequency ventilation of the newborn. Topics in Neonatal Respiratory Care 1997. Brigham and Women's Hospital. October 1997, Boston, MA.
- 24. Synchronized, patient-triggered ventilation in neonates. New York State Society for Respiratory Care Annual Symposium, October 1997, New York, NY.
- 25. Newer technologies in Neonatal respiratory support. Pediatric Grand Rounds. January 1999 Winthrop University Hospital, SUNY, Stony Brook, NY.
- 26. High-frequency jet ventilation tailoring ventilator strategy to disease pathophysiology. Core Fellowship Conference, January 1999, Thomas Jefferson University, Philadelphia, PA.
- 27. High-frequency ventilation: Past/Present/Future. Special lecture to Department of Pediatrics, Children's Hospital of Buffalo, July 1999, SUNY, Buffalo, NY.

- 28. The role of High-frequency ventilation in neonatal respiratory failure. Neonatology 1999: Closing the Millennium. October 1999, Ann Arbor, MI.
- 29. Continuing controversies in persistent pulmonary hypertension of the newborn. Neonatology 1999: Closing the Millennium. October 1999, Ann Arbor, MI.
- 30. Advanced neonatal ventilatory techniques. Management of the Tiny Baby annual conference, February 2000, Orlando, Florida.
- 31. Advanced techniques of synchronized conventional mechanical ventilation in neonates. Neonatology Dinner Meeting, Bryn Mawr Hospital / Thomas Jefferson University, March 2000, Philadelphia, PA.
- 32. Lung injury prevention and advanced techniques of synchronized mechanical ventilation. Grand Rounds, November 2000, Polyclinic Hospital, Harrisburg, PA.
- 33. Lung injury prevention utilizing advanced techniques of synchronized mechanical ventilation. Neonatal Grand Rounds, , June 2001, Boston Children's Hospital, Harvard University, Boston, Massachusetts.
- 34. Principles of lung injury prevention and the use of advanced techniques of synchronized mechanical ventilation. Annual Meeting of the Texas Society for Respiratory Care, July 2001, San Antonio, Texas.
- 35. Airleak prevention and the use of high-frequency jet ventilation and volume targeted conventional ventilation. Thirteenth annual conference of high frequency ventilation and other advances in Perinatal/Neonatal care, November 2001, Tempe, Arizona.
- 36. Case studies in the prevention of airleak complications during HFJV and volume targeted CMV. Thirteenth annual conference of high frequency ventilation and other advances in Perinatal/Neonatal care, November 2001, Tempe, Arizona.
- 37. Volume targeted synchronized mechanical ventilation of newborns. Pennsylvania Society for Respiratory Care annual meeting, April 2003, King of Prussia, PA.
- 38. Patient-triggered ventilation. National Advanced Practice Neonatal Nurses Conference, April 2004, St. Louis, MO.
- 39. Viagra in the NICU: The safe and sane introduction of new therapies in the NICU. National Advanced Practice Neonatal Nurses Conference, April 2004, St. Louis, MO.
- 40. High-frequency jet ventilation: How to get the most out of your Jet. Update on Neonatal Ventilation, St. John's Mercy Medical Center, May 2004, St. Louis, MO.
- 41. High-frequency jet ventilation: Specific indications and difficult clinical situations. Update on Neonatal Ventilation, St. John's Mercy Medical Center, May 2004, St. Louis, MO.

- 42. Modern Conventional Ventilation: Optimizing ventilatory strategies to minimize lung injury. University of Connecticut, June 2004, New Haven, CT.
- 43. Volume-targeted ventilation. Evidence vs Experience in Neonatal Practices. Annenberg Center for Health Sciences CME Conference, October 2004, Chicago, IL.
- 44. Volume-targeted ventilation: State of the Art in Conventional Ventilatory Support. The 16th Annual Conference on High-frequency Ventilation and other Advances in Perinatal/Neonatal Care, November 2004, Phoenix, AZ.
- 45. Treating Newborns with Different Etiologies of Respiratory Failure: Selecting the Best Tools and Strategies. The 16th Annual Conference on High-frequency Ventilation and other Advances in Perinatal/Neonatal Care, November 2004, Phoenix, AZ.
- 46. Ventilator strategies Synchronized and volume targeted ventilation and prevention of lung injury. 28th Annual International Conference Neonatology 2004, November 2004, Key Biscayne, FL.
- 47. An Update on High-frequency Ventilation. 28th Annual International Conference Neonatology 2004, November 2004, Key Biscayne, FL.
- 48. Modern Conventional Ventilation. How to Avoid Injuring the Baby you Seek to Save. Annual Perinatal Day Symposium, co-sponsored by the Committee on the Fetus and Newborn and the Perinatal Sections of the AAP, District II, Chapter 3, May 2005, Valhalla, NY.
- 49. Seminar on Advanced Modes of Ventilation with emphasis on volume targeted ventilation. Florida Hospital, October 2005, Orlando, FL.
- 50. Modern Conventional Ventilation: How to Avoid Injuring the Baby you Seek to Save. Pediatric Grand Rounds, All Children's Hospital, October 2005, St. Petersburg, FL.
- 51. Expanded use of Nitric Oxide in Newborn Infants. 29th Annual Perinatal Symposium, November 2005, Lawn Oak, IL.
- 52. Modern Ventilation: How to Avoid Hurting the Baby You Seek to Save. Third National Advanced Practice Neonatal Nurses Conference, April 2006, Savannah, GA.
- 53. Off Label Care: The Safe and Sane Introduction of New Therapies in the NICU. Third National Advanced Practice Neonatal Nurses Conference, April 2006, Savannah, GA.
- 54. Volume-Targeted Ventilation: State Of The Art In Mechanical Ventilation. Special Neonatal CME conference, November 2006, Jackson, MS.
- 55. Pressure Support Ventilation. University of Connecticut Neonatology CME conference, December 2006, Hartford, CT.

- 56. Expanded use of Inhaled Nitric Oxide in term and preterm newborn infants: latest insights from randomized trials. University of Connecticut Special Neonatal Conference, December 2006, Farmington, CT.
- 57. Modern Conventional Ventilation: How to Avoid Injuring the Baby you Seek to Save. Neonatology 2007 Regional Perinatal Conference, Emory University, March 2007, Atlanta, GA.
- 58. Non-invasive Modes of Ventilation. Neonatology 2007 Regional Perinatal Conference, Emory University, March 2007, Atlanta, GA.
- 59. Update on inhaled nitric oxide therapy: State of the art 2007. First Annual Neonatal Respiratory Symposium, Brigham and Women's Hospital, Harvard University, April 2007, Boston, MA.
- 60. Alternative Modes of Ventilation in the NICU. First Annual Neonatal Respiratory Symposium, Brigham and Women's Hospital, Harvard University, April 2007, Boston, MA.
- 61. The Evolution of Bronchopulmonary Dysplasia and New Treatment Options. 30<sup>th</sup> Annual Current Concepts in Fetal & Neonatal Care Symposium sponsored by the Rhode Island Medical Society and Women & Infants Hospital, Brown University, May 2007, Providence, RI.
- 62. State of the Art in Mechanical Ventilation: Review of available modes, techniques and devices. Special Neonatology CME conference, June 2007, University of Tennessee, Memphis, TN.
- 63. Lung-protective Strategies of Mechanical Ventilation. Neonatology Grand Rounds, June 2007, University of Tennessee, June 2007, Memphis, TN.
- 64. Modern Conventional Ventilation: How to Avoid Injuring the Baby you Seek to Save. "Neonatal Care in a Healing Environment" Annual Neonatal Conference, St. John's Mercy Children's Hospital, September 2007, St. Louis, MO.
- 65. Expanded Use of Inhaled Nitric Oxide in the Term & Preterm Newborn. "Neonatal Care in a Healing Environment" Annual Neonatal Conference, St. John's Mercy Children's Hospital, September 2007, St. Louis, MO.
- 66. Advances in conventional mechanical ventilation. Invited Special Topic lecture, 25<sup>th</sup> Annual conference on high-frequency ventilation of infants, children and adults, Snowbird, Utah, March 2008.
- 67. Can We Prevent Physician-Induced Lung injury? Industry sponsored dinner lecture, May 2008, Orlando, Florida.
- 68. Advances in Conventional Mechanical Ventilation: Can we Avoid Physician-Induced Lung Injury? Industry sponsored dinner lecture, May 2008, St. Petersburg, Florida.
- 69. Lung-Protective Ventilation Strategies: Volume Guarantee and Open Lung Concept. Saint Josephs Hospital, Denver, CO, September 2008.

- 70. New Mechanical Ventilators: Is the Cadillac Really Better? American Academy of Pediatrics National Conference and Exhibition, Boston, MA, October 2008.
- 71. The Role of Adjunct Modes with Conventional Ventilation: Volume Guarantee and Pressure Support. eNeonatal Live: The Neonatal Ventilation Dilemma: What, How and How Long? Satellite CME Symposium on the occasion of the Hot Topics in Neonatology Conference, Washington, DC, December 2008.
- 72. High-Frequency Ventilation and Advanced Conventional Modes: Case Study and Discussion: Live Audience Participation. eNeonatal Live: The Neonatal Ventilation Dilemma: What, How and How Long? Satellite CME Symposium on the occasion of the Hot Topics in Neonatology Conference, Washington, DC, December 2008.
- 73. Lung-protective strategies of mechanical ventilation: How to Avoid Physician-induced Lung Injury. CME conference of The Massachusetts Society for Respiratory Care, Boston, MA, April 2009.
- 74. Are the Future Synthetic Surfactants Promising New Treatments for Surfactant-Deficiency Disorders? Satellite Symposium "The Evolution of Surfactant Therapy" at the PAS meeting, Baltimore, MD May 2009.
- 75. To intubate or not to intubate that is the question! Pro and Con Debate. Con: Nasal CPAP not the panacea we had hoped? Management of Neonatal Respiratory Distress Syndrome: The Times, They Are A Changing. Scientific Symposium at the American Thoracic Society Annual Meeting, San Diego, CA May 2009.
- 76. Inhaled Nitric Oxide Therapy For Hypoxemic Respiratory Failure. Neonatology Conference, Robert Wood Johnson University Hospital, University of Medicine and Dentistry of New Jersey, New Brunswick, NJ, August 2009.
- 77. Weaning and Extubation from Mechanical Ventilation Neonatal Grand Rounds. Madison Key Memorial Lecture Series. Georgetown University, Washington DC, August 2009.
- 78. New Mechanical Ventilators: Is the Cadillac Really Better? American Academy of Pediatrics National Conference and Exhibition, Washington, DC, September 2009.
- 79. Treating the Term / Near-Term Neonate with Persistent Pulmonary Hypertension of the Newborn / Hypoxic Respiratory Failure. The 2nd Annual Pediatric Respiratory Conference, Pennsylvania State Medical Center, Hershey, PA, November 5, 2009.
- 80. Advances in Respiratory Support of Newborns: How to avoid injuring the infant you seek to save. Children's Hospital of Philadelphia Pediatric Grand Rounds, November 2009.
- 81. Volume vs. Pressure Ventilation: Does the Mode Matter? Controversies in Neonatal Ventilation. American Association for Respiratory Care Annual Meeting, San Antonio, TX, December 2009.

- 82. CPAP: Does the Technique Matter? Controversies in Neonatal Ventilation. American Association for Respiratory Care Annual Meeting, San Antonio, TX, December 2009.
- 83. Mechanical Ventilation: Old School vs. New School Approaches What's Best? Neo Conference for Neonatology 2010, Orlando, FL, February 2010.
- 84. High Frequency Ventilation. Neo Conference for Neonatology 2010, Orlando, FL, February 2010.
- 85. Physiology of Mechanical Ventilation: Modes, Loops, and Curves. Neonatal Specialty Review Course. Orlando, FL, February 2010.
- 86. When We Must: Intelligent Ventilation to Avoid Provider-Induced Lung Injury. 13<sup>th</sup> Annual Neonatal Advanced Practice Forum, Washington DC, June 2010.
- 87. HFJV, HFOV and New Modes of Ventilation: The Who, What, When, and How. 13<sup>th</sup> Annual Neonatal Advanced Practice Forum, Washington DC, June 2010.
- 88. The Golden First Hour: Neonatal Resuscitation. Contemporary Management of Neonatal Pulmonary Disorders Conference Tempe, AZ Nov 4-5.
- 89. Volume-Targeted Ventilation: How to Avoid Physician-induced Lung Injury. Contemporary Management of Neonatal Pulmonary Disorders Conference Tempe, AZ Nov 4-5.
- 90. Mechanical Ventilation: Old School vs New School Approaches. Contemporary Management of Neonatal Pulmonary Disorders Conference Tempe, AZ Nov 4-5.
- 91. Ventilator-Induced Lung Injury: What is it? Can we prevent it? Symposium of the Scientific Advisory Board of Ikaria, Dallas, Texas February 2011.
- 92. Physiology of Mechanical Ventilation: Modes, Loops, and Curves. Neonatal Specialty Review Course. Orlando, FL, February 2011.
- 93. Principles of Gas Exchange: CO<sub>2</sub> elimination, oxygenation, tissue oxygen delivery. Neonatal Specialty Review Course. Orlando, FL, February 2011.
- 94. Surfactant, Surfactant Proteins and RDS. (substituting on short notice for another speaker). Neonatal Specialty Review Course. Orlando, FL, February 2011.
- 95. Earlier use of Inhaled Nitric Oxide in Term and Near-term Neonates with Moderate Hypoxic Respiratory Failure and Pulmonary Hypertension. National Physician Lecture Series Webinar, October 2011.
- 96. Respiratory Physiology I: Lung Mechanics. Contemporary Management of Neonatal Pulmonary Disorders Conference, Tempe, AZ November 2011.

- Respiratory Physiology II: Oxygenation and SpO2 targets / Ventilation and PaCO2 targets". Contemporary Management of Neonatal Pulmonary Disorders Conference, Tempe, AZ November 2011.
- 98. Flash Forward: Expanded Use of iNO Therapy Taking a Closer Look. Inhaled Nitric Oxide in the Neonate: Current Role and Future Opportunities. Satellite Symposium, Hot Topics in Neonatology, Washington, DC December 2011.
- Neonatal Respiratory Physiology. Two 90 minute interactive audience response system presentations. NeoPREP Board Review course, American Academy of Pediatrics, New Orleans, LA January 2012.
- 100. Problem Based Review of O<sub>2</sub> and CO<sub>2</sub> Physiology, Alveolar Gas Equation, Bohr Effect. Specialty in Review in Neonatology/Perinatology 2.0. Orlando, FL February 2012.
- 101. Physiology of Mechanical Ventilation: Modes, Loops, and Curves. Specialty in Review in Neonatology/ Perinatology 2.0. Orlando, FL February 2012.
- 102. Invited Special Lecture, Physician Induced Lung Injury: What Causes It And How Can We Prevent It? 29<sup>th</sup> Conference on High Frequency Ventilation of Infants, Children and Adults, Snowbird, Utah March 2012.
- 103. New concepts in lung injury prevention. Topics in Clinical Medicine, Academic Day, Mednax Medical Directors Meeting, Orlando, FL April 2012.
- 104. Problem Based Review of O<sub>2</sub> and CO<sub>2</sub> Physiology, Alveolar Gas Equation, Bohr Effect. Specialty in Review in Neonatology/Perinatology, Orlando, FL February 2013.
- 105. Physiology of Mechanical Ventilation: Modes, Loops, and Curves. Specialty in Review in Neonatology/ Perinatology, Orlando, FL February 2013.

## **International:**

- 1. New developments in synchronized mechanical ventilation of newborns. German-Austrian Neonatal Society 23rd Annual Meeting, October 1997, Muenster, Germany.
- 2. Neonatal high-frequency ventilation. Ninth Neonatology conference: State of the art in respiratory care of newborns. June 1998, Ustron, Poland.
- 3. Nitric oxide and its role in the treatment of PPHN. Ninth Neonatology conference: State of the art in respiratory care of newborns. June 1998, Ustron, Poland.
- 4. Synchronized mechanical ventilation in newborns. Special Neonatology seminar, Second Perinatal Clinic, Charles University, June 1998, Prague, Czech Republic.

- 5. New developments in conventional ventilation in neonates. Special Neonatology conference, National University of Kuala Lumpur Hospital, June 1998, Kuala Lumpur, Malaysia.
- 6. New developments in conventional mechanical ventilation of infants. The Hong Kong Society of Neonatal Medicine Scientific Meeting, July 1998, Hong Kong, China.
- 7. New developments in conventional mechanical ventilation of infants. 1998 Symposium on Respiratory Therapy of the Society of Neonatology of the Republic of China, July 1998, Taipei, Republic of China.
- 8. New data on pressure support and volume guarantee modes of ventilation. German-Austrian Neonatal Society 24<sup>th</sup> Annual Meeting, September 1998, Frankfurt, Germany.
- 9. New developments in conventional mechanical ventilation of infants. Special Symposium of the Yokohama Neonatal Study Group, September 1998, Yokohama, Japan.
- 10. Advances in synchronized mechanical ventilation of infants. Special Symposium of the Neonatal Society chaired by Professor Hiroshi Nischida, September 1998, Tokyo, Japan.
- 11. Advances in synchronized mechanical ventilation of infants. Special Neonatology Symposium, October 1998, Sendai, Japan.
- 12. Therapeutic alternatives in the treatment of severe respiratory failure at the turn of the 21st century. VI congress of the Czech Society for Anesthesia, Resuscitation and Critical Care, September 1999, Brno, Czech Republic.
- 13. Advanced techniques in conventional mechanical ventilation in neonates. Special Neonatology Symposium, November 1999, Bejing, People's Republic of China.
- 14. High-frequency ventilation . Special Neonatology Symposium, November 1999, Bejing, People's Republic of China.
- 15. Advanced techniques in conventional mechanical ventilation in neonates. Special Symposium of the Shanghai Neonatology Society, November 1999, Shanghai, People's Republic of China.
- 16. The role of High-frequency ventilation in neonatal respiratory failure. Special Symposium of the Shanghai Neonatology Society, November 1999, Shanghai, People's Republic of China.
- Controversies in the treatment of persistent pulmonary hypertension of the newborn. Special Symposium of the Shanghai Neonatology Society, November 1999, Shanghai, People's Republic of China.
- 18. Advanced techniques in conventional mechanical ventilation in neonates. 44<sup>th</sup> Annual Meeting of the Japan Society for Premature and Newborn Medicine, November 1999, Okayama, Japan.

- 19. Strategies and ventilatory modalities in the new Millennium. Neonatology Dinner Meeting Toronto, June 2000, Ontario, Canada. Advanced Neonatal Ventilation Strategies. Neonatal Symposium, The Mitchener Institute for Applied Health Sciences, June 2000, Toronto, Canada.
- 20. Advanced neonatal conventional ventilatory techniques. 1st meeting of the Perinatal Society of the United Arab Emirates, October 2000, Faculty of Medicine, University of United Arab Emirates Al Ain, Al Ain, United Arab Emirates.
- 21. Ventilatory strategies in congenital diaphragmatic hernia. 1st meeting of the Perinatal Society of the United Arab Emirates, October 2000, Faculty of Medicine, University of United Arab Emirates Al Ain, Al Ain, United Arab Emirates.
- 22. The first minutes of life how to avoid early lung damage. 1st meeting of the Perinatal Society of the United Arab Emirates, October 2000, Faculty of Medicine, University of United Arab Emirates Al Ain, Al Ain, United Arab Emirates.
- 23. Advanced neonatal ventilatory techniques. 1st International Symposium on Perinatal and Neonatal Developmental Medicine, November 2000, Prague, Czech Republic.
- 24. Pathophysiology of respiratory failure in the neonate. Guest lecture, Annual meeting of the Norwegian Pediatric Association, October 2001, Tromso, Norway.
- 25. Practical application of modern conventional ventilation techniques. Guest lecture, Annual meeting of the Norwegian Pediatric Association, October 2001, Tromso, Norway.
- 26. Lung injury prevention and the use of advanced techniques of synchronized mechanical ventilation. Guest lecture, 21st Annual meeting of the Swedish Association for Perinatal Medicine, October 2000, Stockholm, Sweden.
- 27. The role of advanced synchronized mechanical ventilation modes in the prevention of lung injury. Special Neonatal Symposium, Sofia Children's Hospital, Erasmus University, February 2002, Rotterdam, Netherlands.
- 28. The role of advanced synchronized mechanical ventilation modes in the prevention of lung injury. Special Neonatal Symposium "de Ouwe Schuur", February 2002, Brussels, Belgium.
- 29. Pathophysiology of respiratory failure / ventilator induced lung injury. Annual Meeting of the Israeli Neonatal Society, February 2002, Tel Aviv, Israel.
- 30. Advanced modes of Synchronized Conventional Ventilation. Annual Meeting of the Israeli Neonatal Society, February 2002, Tel Aviv, Israel.
- 31. Introduction to High-Frequency Ventilation. IPOKRaTES International Clinical Seminar on High-Frequency Ventilation, March 2002, Prague, Czech Republic.

- 32. Controlled Clinical Trials of High-Frequency Ventilation in Infants with RDS. IPOKRaTES International Clinical Seminar on High-Frequency Ventilation, March 2002, Prague, Czech Republic.
- 33. Safety Considerations in the Use of High-Frequency Ventilation. IPOKRaTES International Clinical Seminar on High-Frequency Ventilation, March 2002, Prague, Czech Republic.
- 34. Other Indications for High-Frequency Ventilation. IPOKRaTES International Clinical Seminar on High-Frequency Ventilation, March 2002, Prague, Czech Republic.
- 35. Use of High-Frequency Ventilation and Inhaled Nitric Oxide to Reduce the Need for Extracorporeal Membrane Oxygenation. IPOKRaTES International Clinical Seminar on High-Frequency Ventilation, March 2002, Prague, Czech Republic.
- 36. Ventilator strategies for lung injury prevention and the use of advanced techniques of synchronized mechanical ventilation. Orphan Europe Academy: Respiratory support options for neonates from CPAP to ECMO, October 2002, Stockholm, Sweden.
- 37. Tracheal tubes and ventilators: Added workload and its implications. Curriculum of Excellence in Neonatology: Respiratory Disorders. IPOKRaTES Clinical Seminar, October 2002, Rome, Italy.
- 38. Neonatal High-Frequency Ventilation: Past, Present and Future. Curriculum of Excellence in Neonatology: Respiratory Disorders. IPOKRaTES Clinical Seminar, October 2002, Rome, Italy.
- 39. Pressure Support and Volume Guarantee Ventilation. Curriculum of Excellence in Neonatology: Respiratory Disorders. IPOKRaTES Clinical Seminar, October 2002, Rome, Italy.
- 40. High-Frequency Jet Ventilation: specific indications. International Neonatology Conference Maternidade, Dr. Alfredo da Costa, November 2002, Lisbon, Portugal.
- 41. Nitric Oxide: indications and results in term and preterm infants. International Neonatology Conference Maternidade Dr. Alfredo da Costa, November 2002, Lisbon, Portugal.
- 42. Introduction to High-Frequency Ventilation. IPOKRaTES International Clinical Seminar on High-Frequency Ventilation, May 2003, Sopron, Hungary.
- 43. Clinical Trials of High-Frequency Ventilation in Infants with RDS. IPOKRaTES International Clinical Seminar on High-Frequency Ventilation, May 2003, Sopron, Hungary.
- 44. Safety Considerations in the Use of High-Frequency Ventilation. IPOKRaTES International Clinical Seminar on High-Frequency Ventilation, May 2003, Sopron, Hungary.
- 45. Other Indications for High-Frequency Ventilation. IPOKRaTES International Clinical Seminar on High-Frequency Ventilation, May 2003, Sopron, Hungary.

- 46. High-Frequency Ventilation and Inhaled Nitric Oxide to Reduce the Need for Extracorporeal Membrane Oxygenation. IPOKRaTES International Clinical Seminar on High-Frequency Ventilation, May 2003, Sopron, Hungary.
- 47. HFV- Clinical case presentations. IPOKRaTES International Clinical Seminar on High-Frequency Ventilation, May 2003, Sopron, Hungary.
- 48. Modern conventional ventilation: Strategies for lung injury prevention. Open Medical Club of Slovakia Seminar on Mechanical Ventilation in Neonates, May 2003, Bratislava, Slovakia.
- 49. High-frequency ventilation and modern conventional ventilation: More similar than you think. Open Medical Club of Slovakia Seminar on Mechanical Ventilation in Neonates, May 2003, Bratislava, Slovakia.
- 50. New types of neonatal respiratory assistance: A controversy. Volume targeted ventilation vs. Proportional Assist ventilation. European Society for Pediatric Research Annual meeting, September 2003, Bilbao, Spain.
- 51. Ventilator strategies for lung injury prevention and the use of advanced techniques of synchronized mechanical ventilation. Orphan Europe Academy: Respiratory support options for neonates from CPAP to HFV, October 2003, Stockholm, Sweden.
- 52. High-frequency ventilation State of the art. Orphan Europe Academy: Respiratory support options for neonates from CPAP to HFV, October 2003, Stockholm, Sweden.
- 53. Ventilation and Oxygen. Breakfast session, Annual Meeting of the Perinatal Society of Australia and New Zealand, March 2004, Sydney, Australia.
- 54. State-of-the-art Mechanical Ventilation: Can we Reduce Ventilatory-Induced Lung Injury? Annual Meeting of the Perinatal Society of Australia and New Zealand, March 2004, Sydney, Australia.
- 55. Modern Conventional Ventilation: How do we avoid injuring the baby we seek to save? Neonatal Update Meeting, The Royal Women's Hospital, March 2004, Melbourne, Australia.
- 56. High-frequency ventilation overview. IPOKRaTES postgraduate course on Neonatal Respiratory Support, March 2004, Guangzhou, China.
- 57. High-frequency ventilation specific indications. IPOKRaTES postgraduate course on Neonatal Respiratory Support, March 2004, Guangzhou, China.
- 58. Endotracheal tubes and ventilators: Added workload and its implications in modern mechanical ventilation. IPOKRaTES postgraduate course on Neonatal Respiratory Support, March 2004, Guangzhou, China.
- 59. Modern Conventional Ventilation: Pressure support and Volume Guarantee IPOKRaTES postgraduate course on Neonatal Respiratory Support, March 2004, Guangzhou, China.

- 60. The use of pulmonary function measurements and waveforms to optimize ventilator therapy. Neonatal pulmonary function workshop, Seventh European Conference on Neonatal and Pediatric Ventilation, March 2004, Montreux, Switzerland.
- 61. The interaction between surfactant and mechanical ventilation: Clinical aspects. Surfactant Symposium, Seventh European Conference on Neonatal and Pediatric Ventilation, March 2004, Montreux, Switzerland.
- 62. High-frequency ventilation Selected aspects and review of recent studies . IPOKRaTES postgraduate course on Neonatal Respiratory Support, September 2004, Singapore.
- 63. Pathophysiology and treatment of congenital diaphragmatic hernia. IPOKRaTES postgraduate course on Neonatal Respiratory Support, September 2004, Singapore.
- 64. Endotracheal tubes and ventilators: Added workload and its implications in modern mechanical ventilation. IPOKRaTES postgraduate course on Neonatal Respiratory Support, September 2004, Singapore.
- 65. Volume targeted ventilation. IPOKRaTES postgraduate course on Neonatal Respiratory Support, September 2004, Singapore.
- 66. Disease specific strategies of high-frequency ventilation. Special Neonatology lecture, KK Women's and Children's Hospital, September 2004, Singapore.
- 67. Synchronized and volume targeted ventilation. Satellite symposium on respiratory support, Annual meeting of the Czech Neonatal Society, September 2004, Hradec Kralove, Czech Republic.
- 68. Mechanical ventilation. Respiratory course in association with the Annual meeting of the European Society for Pediatric Research: "Respiratory support options for neonates from CPAP to HFV", September 2004, Stockholm, Sweden.
- 69. Pathophysiology and prevention of ventilator induced lung injury. Special Neonatal Ventilation Symposium, February 2005, Zagreb, Croatia.
- 70. Volume-targeted Ventilation: State of the Art in Conventional Mechanical Ventilation. Special Neonatal Ventilation Symposium, February 2005, Zagreb, Croatia.
- 71. Pressure Support Ventilation. New Frontiers in Neonatology Symposium on the occasion of the 5thAnniversary of IPOKRaTES, February 2005, Innsbruck, Austria.
- 72. Volume Guarantee Ventilation. New Frontiers in Neonatology Symposium on the occasion of the 25th Anniversary of IPOKRaTES, February 2005, Innsbruck, Austria.
- 73. Update on High-Frequency Ventilation 2005: New Frontiers in Neonatology Symposium on the occasion of the 25th Anniversary of IPOKRaTES, February 2005, Innsbruck, Austria.

- 74. Introduction to HFV and historical aspects. IPOKRaTES clinical seminar: High-Frequency Ventilation and Other Advanced Ventilatory Strategies in Newborn Infants. May 2005, Erlangen, Germany.
- 75. Other indications for HFV: Matching strategies of HFV with disease pathophysiology. IPOKRaTES clinical seminar: High-Frequency Ventilation and Other Advanced Ventilatory Strategies in Newborn Infants. May 2005, Erlangen, Germany.
- 76. How to avoid damaging the baby we seek to save: Complications and safety of mechanical ventilation with emphasis on HFV. IPOKRaTES clinical seminar: High-Frequency Ventilation and Other Advanced Ventilatory Strategies in Newborn Infants. May 2005, Erlangen, Germany.
- 77. Volume targeted ventilation: The new frontier? IPOKRaTES clinical seminar: High-Frequency Ventilation and Other Advanced Ventilatory Strategies in Newborn Infants. May 2005, Erlangen, Germany.
- 78. State-of-the-Art in Mechanical Ventilation. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, January 2006, Parma, Italy.
- 79. Volume-Targeted Ventilation: New Paradigm in Neonatal Ventilation. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, January 2006, Parma, Italy.
- 80. Update on High-Frequency Ventilation. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, January 2006, Parma, Italy.
- 81. High-frequency Ventilation Specific Indications. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, January 2006, Parma, Italy.
- 82. State-of-the-Art in Mechanical Ventilation: Overview of Available Modes, Techniques and Devices. Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, February 2006, Bilbao, Spain.
- 83. Update on High-Frequency Ventilation. Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, February 2006, Bilbao, Spain.
- 84. Lung-protective Strategies of Mechanical Ventilation. Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, February 2006, Bilbao, Spain.
- 85. Initiation of Ventilatory Support Nasal CPAP and VG modes: less harmful approach. XXth European Congress of Perinatal Medicine, Prague, May 2006, Czech Republic.

- 86. State Of The Art In Mechanical Ventilation: Review of available modes, techniques and devices. Fourth International Symposium "El Pulmon del Recien Nacido" (The lung of the newly born), June 2006, Buenos Aires, Argentina.
- 87. Volume-Targeted Ventilation: New Paradigm In Neonatal Ventilation. Fourth International Symposium "El Pulmon del Recien Nacido" (The lung of the newly born), June 2006, Buenos Aires, Argentina.
- 88. Lung Protective Strategies Of Mechanical Ventilation. Fourth International Symposium "El Pulmon del Recien Nacido" (The lung of the newly born), Argentina, June 2006, Buenos Aires.
- 89. Update on High-Frequency Ventilation. Fourth International Symposium "El Pulmon del Recien Nacido" (The lung of the newly born), Argentina, June 2006, Buenos Aires.
- 90. Use Of Nitric Oxide In Newborns With Respiratory Distress Syndrome An Update Fourth International Symposium "El Pulmon del Recien Nacido" (The lung of the newly born), June 2006, Buenos Aires, Argentina.
- 91. Weaning from Mechanical Ventilation. Lecture as part of European Society of Neonatology, High Training in Neonatal Medicine Respiratory Course in conjunction with the European Academy of Pediatrics meeting October 2006, Barcelona, Spain.
- 92. Recent Advances in Respiratory Support of Premature Infants. State of the Art Lecture, Saudi Pediatric Association Third International Conference on Child Health, November 2006, Jeddah, Saudi Arabia.
- 93. Treatment of Congenital Diaphragmatic Hernia. Satellite lecture, Saudi Pediatric Association Third International Conference on Child Health, November 2006, Jeddah, Saudi Arabia.
- 94. Volume Guarantee: Why, When and How? Neonatal Update 2006, Imperial College London, November 2006, London, England.
- 95. The Golden First Hour after Birth. Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, February 2007, All India Institute of Medical Sciences (AIIMS), New Delhi, India.
- 96. State of the Art in Mechanical Ventilation: Review of available modes, techniques and devices. Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, February 2007, Medical Sciences (AIIMS), New Delhi, India.
- 97. Update on High-frequency Ventilation. Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, February 2007, Medical Sciences (AIIMS), New Delhi, India.

- 98. Volume-Targeted Ventilation: New Paradigm In Neonatal Ventilation. Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, February 2007, Medical Sciences (AIIMS), New Delhi, India.
- 99. State of the Art in Mechanical Ventilation: Review of available modes, techniques and devices. Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, February 2007, Istanbul, Turkey.
- 100. Update on High-frequency Ventilation. Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, February 2007, Istanbul, Turkey.
- 101. Lung-protective Strategies of Mechanical Ventilation. Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, February 2007, Istanbul, Turkey.
- 102. Effect of Delivery Room Management on Respiratory Outcome. First International Neonatal Respiratory Symposium, March 2007, College of the North Atlantic, Doha, Qatar.
- 103. Pressure Support and Volume Guarantee ventilation: Do they make a difference. First International Neonatal Respiratory Symposium, March 2007, College of the North Atlantic, Doha, Qatar.
- 104. Oxygen Therapy: The Good, the Bad and the Ugly. First International Neonatal Respiratory Symposium, March 2007, College of the North Atlantic, Doha, Qatar.
- 105. Modern Conventional Ventilation: How to Avoid Injuring the Baby you Seek to Save. Jornada Internacional de Neonatologia, Hospital Universitaire "La FE", June 2007, Valencia, Spain.
- 106. Modern Conventional Ventilation. Keynote address, Abbot Roundtable "The Wonder of Neonatology" August 2007, Drakensburg, South Africa.
- 107. Non-invasive modes of ventilation: Less is better. Abbot Roundtable "The Wonder of Neonatology" August 2007, Drakensburg, South Africa.
- 108. State of the Art in Mechanical Ventilation: Review of available modes, techniques and devices. Abbot Roundtable "The Wonder of Neonatology" August 2007, Drakensburg, South Africa.
- 109. Oxygen Therapy: the good, the bad and the ugly. Abbot Roundtable "The Wonder of Neonatology" August 2007, Drakensburg, South Africa.
- 110. State of the Art in Mechanical Ventilation: Review of available modes, techniques and devices. Resuscitation, Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, September 2007, Porto, Portugal.

- 111. Update on High-frequency Ventilation. Resuscitation, Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, September 2007, Porto, Portugal.
- 112. Lung-protective Strategies of Mechanical Ventilation. Resuscitation, Respiratory Assistance, Ventilation and Care of the Newborn Infant. IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, September 2007, Porto, Portugal.
- 113. Neonatal Ventilation: Is what you set what you get and do you need to? Neonatal care: Challenges Today and Into the Future Conference, Royal College of Pediatrics and Child Health, October 2007, London, England.
- 114. Rationale for Volume-Targeted Ventilation and Adequate PEEP. Neonatal Lung Injury: What is the role of Volume Guarantee Ventilation? Intense One-day Neonatal Respiratory Seminar, Ospedale dei Bambini "V. Buzzi" October 2007, Milan, Italy.
- 115. Volume Guarantee Ventilation Present and Future applications. Neonatal Lung Injury: What is the role of Volume Guarantee Ventilation? Intense One-day Neonatal Respiratory Seminar, Ospedale dei Bambini "V. Buzzi" October 2007, Milan, Italy.
- 116. Principles of gas exchange: CO<sub>2</sub> elimination, oxygenation, tissue oxygen delivery. IPOKRaTES Postgraduate Seminar on Neonatal pulmonary critical care: State-of-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. Dubai, United Arab Emirates, March 2008.
- 117. Modern mechanical ventilation: Overview of basic modes and techniques. IPOKRaTES Postgraduate Seminar on Neonatal pulmonary critical care: State-of-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. Dubai, United Arab Emirates, March 2008.
- 118. Volume-targeted ventilation: New paradigm in neonatal ventilation. IPOKRaTES Postgraduate Seminar on Neonatal pulmonary critical care: State-of-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. Dubai, United Arab Emirates, March 2008.
- 119. CDH contemporary management and outcome. IPOKRaTES Postgraduate Seminar on Neonatal pulmonary critical care: State-of-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. Dubai, United Arab Emirates, March 2008.
- 120. Advances in conventional mechanical ventilation: Strategies for preventing lung injury. 8<sup>th</sup> International Conference on Perinatal Topics: Update on Mechanical Ventilation of Newborns. Santiago de Chile, April 2008.
- 121. Volume Guarantee Ventilation: A way to prevent volutrauma? 8<sup>th</sup> International Conference on Perinatal Topics: Update on Mechanical Ventilation of Newborns. Santiago de Chile, April 2008.

- 122. High-Frequency Ventilation: Current Status. 8<sup>th</sup> International Conference on Perinatal Topics: Update on Mechanical Ventilation of Newborns. Santiago de Chile, April 2008.
- 123. Persistent Pulmonary Hypertension: Current Therapeutic Approach. 8<sup>th</sup> International Conference on Perinatal Topics: Update on Mechanical Ventilation of Newborns. Santiago de Chile, April 2008.
- 124. Inhaled Nitric Oxide Therapy in Preterm newborns: Can it prevent Bronchopulmonary Dysplasia? 8<sup>th</sup> International Conference on Perinatal Topics: Update on Mechanical Ventilation of Newborns. Santiago de Chile, April 2008.
- 125. Volume-targeted and Volume Guarantee Ventilation. Pre-congress Course "Mechanical Ventilation: New Therapeutic Approaches." XXI European Congress of Perinatal Medicine, Istanbul, Turkey, September 2008.
- 126. Real-Time Pulmonary Graphics: Benefits and Limitations. Pre-congress Course "Mechanical Ventilation: New Therapeutic Approaches." XXI European Congress of Perinatal Medicine, Istanbul, Turkey, September 2008.
- 127. High-Frequency Ventilation: Evidence-Based Recommendations: Pre-congress Course "Mechanical Ventilation: New Therapeutic Approaches." XXI European Congress of Perinatal Medicine, Istanbul, Turkey, September 2008.
- 128. Mechanical Ventilation: New Therapeutic Approaches. Lecture, Parallel session: "Respiratory Interventions" XXI European Congress of Perinatal Medicine, Istanbul, Turkey, September 2008.
- 129. Volume Guarantee in the context of Lung-Protective Ventilation Strategies. King Khalid Medical City, Riyadh, Saudi Arabia, September 2008.
- 130. Volume Guarantee in the context of Lung-Protective Ventilation Strategies. King Faisal National Guard Specialist Hospital and Research Center, Jeddah, Saudi Arabia, September 2008.
- 131. Current Concepts in Neonatal Ventilation: How to Avoid Physician-Induced Lung Injury. Second Neonatology Symposium of the Puerto Rico and Caribbean Neonatal Society, San Juan, Puerto Rico, September 2008.
- 132. Lung-protective Ventilation Strategies in the Newborn Infant. 15<sup>th</sup> National Congress of the Czech Society of Anesthesia, Resuscitation and Intensive Care Medicine, Brno, Czech Republic, October 2008.
- 133. Lung Recruitment and Lung-Protective Strategies of Mechanical Ventilation. IPOKRaTES Postgraduate Course on Respiratory Disorders in the Newborn Infant. Padua, Italy, November 2008.
- 134. Update on High-frequency Ventilation. IPOKRaTES Postgraduate Course on Respiratory Disorders in the Newborn Infant. Padua, Italy, November 2008.

- 135. Volume Guarantee Ventilation. IPOKRaTES Postgraduate Course on Respiratory Disorders in the Newborn Infant. Padua, Italy, November 2008.
- 136. Lung-Protective Modes of Mechanical Ventilation. First International Congress of the Union of European Neonatal and Perinatal Societies: Global Neonatology and Perinatology. Rome, Italy, November 2008.
- 137. How to Avoid Injuring the Baby You Seek to Save Using Modern Conventional Ventilation. Lecture to the Pediatric Society of Singapore and Perinatal Society of Singapore, January 2009.
- 138. Protective Ventilation Strategies. 4<sup>th</sup> International Neonatal Conference "Hot Topics in Neonatal Medicine" King Fahd Armed Forces Hospital, Jeddah, Kingdom of Saudi Arabia, February 2009.
- 139. High-Frequency Ventilation Clinical Scenarios. 4<sup>th</sup> International Neonatal Conference "Hot Topics in Neonatal Medicine" King Fahd Armed Forces Hospital, Jeddah, Kingdom of Saudi Arabia, February 2009.
- 140. Acceptable Oxygen Saturation: What is the evidence? 4<sup>th</sup> International Neonatal Conference "Hot Topics in Neonatal Medicine" King Fahd Armed Forces Hospital, Jeddah, Kingdom of Saudi Arabia, February 2009.
- 141. Update on Surfactant. 4<sup>th</sup> International Neonatal Conference "Hot Topics in Neonatal Medicine" King Fahd Armed Forces Hospital, Jeddah, Kingdom of Saudi Arabia, February 2009.
- 142. The Golden First Hour after Birth: Delivery room stabilization. 4<sup>th</sup> International Neonatal Conference "Hot Topics in Neonatal Medicine" King Fahd Armed Forces Hospital, Jeddah, Kingdom of Saudi Arabia, February 2009.
- 143. Principles of gas exchange: CO2 elimination, oxygenation, tissue oxygen delivery. IPOKRaTES Postgraduate Course on Neonatal Pulmonary and Critical Care: State-of-the-art in Respiratory Assistance, Delivery Room Care and Prevention & Treatment of Chronic Lung Disease. Prague, Czech Republic, October 2009.
- 144. Oxygen or RA for neonatal resuscitation? IPOKRaTES Postgraduate Course on Neonatal Pulmonary and Critical Care: State-of-the-art in Respiratory Assistance, Delivery Room Care and Prevention & Treatment of Chronic Lung Disease. Prague, Czech Republic, October 2009.
- 145. Modern mechanical ventilation: overview of basic modes and techniques. IPOKRaTES Postgraduate Course on Neonatal Pulmonary and Critical Care: State-of-the-art in Respiratory Assistance, Delivery Room Care and Prevention & Treatment of Chronic Lung Disease. Prague, Czech Republic, October 2009.
- 146. Volume Guarantee Ventilation. IPOKRaTES Postgraduate Course on Neonatal Pulmonary and Critical Care: State-of-the-art in Respiratory Assistance, Delivery Room Care and Prevention & Treatment of Chronic Lung Disease. Prague, Czech Republic, October 2009.

- 147. Optimizing Weaning and Extubation. IPOKRaTES Postgraduate Course on Neonatal Pulmonary and Critical Care: State-of-the-art in Respiratory Assistance, Delivery Room Care and Prevention & Treatment of Chronic Lung Disease. Prague, Czech Republic, October 2009.
- 148. Volume-targeted ventilation: new paradigm in neonatal ventilation. IPOKRaTES Postgraduate Course on Neonatal Pulmonary and Critical Care: State-of-the-art in Respiratory Assistance, Delivery Room Care and Prevention & Treatment of Chronic Lung Disease. Prague, Czech Republic, October 2009.
- 149. INSURE, Infant Flow, Positive Pressure and Volume Guarantee tell us what is best: Selection of respiratory support modalities in the NICU. International Conference on Clinical Neonatology: "Questions & Answers in NICU: Everything You Always Wanted To Know About Preterm Neonates But Were Afraid To Ask", Torino, Italy, November 2009.
- 150. Volume Guarantee Ventilation. Conference on the Early Management of Respiratory Distress Syndrome in Premature Neonates Universita Cattolica del Sacro Cuore, Rome, Italy, March 2010.
- 151. Technological Innovations for Optimizing Neonatal Pulmonary Care. Developing Safe and Effective Devices and Instruments for Use in the Neonatal Intensive Care for the 21st Century PAS Topic Symposium. Vancouver, Canada, May 2010.
- 152. Lung-protective ventilation strategies. Pediatric Grand Rounds, Janeway Children's Hospital, Memorial University of Newfoundland, St. John's, Newfoundland, Canada, May 2010.
- 153. Strategies for Optimal Oxygenation/Ventilation during High-Frequency Ventilation. Canadian Society of Respiratory Therapists Annual Meeting, St. John's Newfoundland, Canada, May 2010.
- 154. Lung Protective Ventilation and Avoidance of Chronic Lung Disease in Neonates. Canadian Society of Respiratory Therapists Annual Meeting, St. John's Newfoundland, Canada, May 2010.
- 155. Principles of Gas Exchange: CO<sub>2</sub> elimination, target PCO<sub>2</sub>, permissive hypercapnia. IPOKRaTES Clinical Seminar: Pulmonary Care of the Newborn Infant from Birth to Discharge. Alexandria, Egypt, May 2010.
- 156. Principles of Gas Exchange: Oxygenation, tissue oxygen delivery, oxygen saturation targets. IPOKRaTES Clinical Seminar: Pulmonary Care of the Newborn Infant from Birth to Discharge. Alexandria, Egypt, May 2010.
- 157. Delivery Room Stabilization: The Golden First Hour. IPOKRaTES Clinical Seminar: Pulmonary Care of the Newborn Infant from Birth to Discharge. Alexandria, Egypt, May 2010.
- 158. Non-Invasive Respiratory Support. IPOKRaTES Clinical Seminar: Pulmonary Care of the Newborn Infant from Birth to Discharge. Alexandria, Egypt, May 2010.

- 159. Modern mechanical ventilation: overview of basic modes and techniques. IPOKRaTES Clinical Seminar: Pulmonary Care of the Newborn Infant from Birth to Discharge. Alexandria, Egypt, May 2010.
- 160. Optimizing Weaning and Extubation. IPOKRaTES Clinical Seminar: Pulmonary Care of the Newborn Infant from Birth to Discharge. Alexandria, Egypt, May 2010.
- 161. Lung-Protective Strategies of Mechanical Ventilation. IPOKRaTES Clinical Seminar: Pulmonary Care of the Newborn Infant from Birth to Discharge. Alexandria, Egypt, May 2010.
- 162. Volume Guarantee Ventilation: A new paradigm in neonatal ventilation. IPOKRaTES Clinical Seminar: Pulmonary Care of the Newborn Infant from Birth to Discharge. Alexandria, Egypt, May 2010.
- 163. Inhaled Nitric Oxide Therapy for Term and Preterm Infants. IPOKRaTES Clinical Seminar: Pulmonary Care of the Newborn Infant from Birth to Discharge. Alexandria, Egypt, May 2010.
- 164. Principles of Gas Exchange: CO<sub>2</sub> elimination, oxygenation, tissue oxygen delivery. IPOKRaTES Clinical Seminar: Neonatal Neurology, Respiratory and Nutrition, Gastro-intestinal Disorders in the Newborn Infant. Rio de Janeiro, Brazil, June 2010.
- 165. Modern mechanical ventilation: overview of basic modes and techniques. IPOKRaTES Clinical Seminar: Neonatal Neurology, Respiratory and Nutrition, Gastro-intestinal Disorders in the Newborn Infant. Rio de Janeiro, Brazil, June 2010.
- 166. Optimizing Weaning and Extubation. IPOKRaTES Clinical Seminar: Neonatal Neurology, Respiratory and Nutrition, Gastro-intestinal Disorders in the Newborn Infant. Rio de Janeiro, Brazil, June 2010.
- 167. The importance of and strategies for lung recruitment. International Neonatology Congress, Rio de Janeiro, Brasil, June 2010.
- 168. Evolution of Neonatal Respiratory Support. 30<sup>th</sup> Anniversary of IPOKRaTES Academic Seminar: The Best of IPOKRaTES. Kos, Greece, Nov19-20, 2010.
- 169. Choice of Respiratory Support Modalities in 2010. Slovak National Neonatal Congress, Nove Zamky, Slovakia, Nov 23-24 2010.
- 170. Inhaled Nitric Oxide in Preterm Neonates. Slovak National Neonatal Congress, Nove Zamky, Slovakia, Nov 23-24 2010.
- 171. Oxygen Therapy in the Delivery Room and in the NICU. Care of the Extremely Low Birth Weight Infant Conference, First Perinatal Clinic, Charles University, Prague, Czech Republic, November 2010.

- 172. Pressure of Volume Controlled Ventilation Strategies for Extremely Low Birth Weight Infants? Care of the Extremely Low Birth Weight Infant Conference, First Perinatal Clinic, Charles University, Prague, Czech Republic, November 2010.
- 173. Non-invasive Respiratory Support of the Preterm Infant. 11<sup>th</sup> Annual meeting of the Saudi Neonatology Society, Riyadh, Saudi Arabia April 2011.
- 174. The First Golden Hour: Delivery Room Stabilization. 11<sup>th</sup> Annual meeting of the Saudi Neonatology Society, Riyadh, Saudi Arabia April 2011.
- 175. Advances in Respiratory Support of Premature Infants: Lung-protection ventilation. The 56<sup>th</sup> Congress of Japan Society for Premature and Newborn Medicine, Tokyo, Japan, November 2011.
- 176. Volume Guarantee Ventilation. The 56<sup>th</sup> Congress of Japan Society for Premature and Newborn Medicine, Tokyo, Japan, November 2011.
- 177. Volume Guarantee Ventilation: Practical Aspects. Otsuki Central Hospital, Osaka, Japan November 2011.
- 178. Advantages and Clinical Guidelines for Volume Guarantee Ventilation. Neonatal Ventilation Workshop, Ho Chi Minh City, Vietnam, November 2011.
- 179. Update on HFOV and HFJV for neonatal respiratory support. Neonatal Ventilation Workshop, Ho Chi Minh City, Vietnam, November 2011.
- 180. Ventilation modes in neonates. Neonatal Ventilation Seminar, Queen Sirikit Institute of Child, Bangkok, Thailand, November 2011.
- 181. Ventilation strategies for major lung diseases. Neonatal Ventilation Seminar, Queen Sirikit Institute of Child, Bangkok, Thailand, November 2011.
- 182. Respiratory monitoring: Loops and waveforms. Neonatal Ventilation Seminar, Queen Sirikit Institute of Child, Bangkok, Thailand, November 2011.
- 183. Case Study presentation and discussion. Neonatal Ventilation Seminar, Queen Sirikit Institute of Child, Bangkok, Thailand, November 2011.
- 184. HFOV and HFOV with VG New trend in lung protective strategy. Neonatal Ventilation Seminar, Queen Sirikit Institute of Child, Bangkok, Thailand, November 2011.
- 185. Volume Guarantee Ventilation. International Webinar December 2011.
- 186. Weaning and Extubation Strategies. Montreal Children's Hospital, McGill University, Montreal, Canada April 2012.

- 187. High-Frequency Jet Ventilation: Tailoring ventilation strategy to disease pathophysiology. Montreal Children's Hospital, McGill University, Montreal, Canada April 2012.
- 188. Delivery Room Stabilization: The Golden First Hour. Neonatal Care Today Conference, Toronto, Ontario, Canada, April 2012.
- 189. Essentials of pulmonary physiology and lung mechanics. IPOKRaTES Clinical Seminar: Neonatal pulmonary critical care. State-of-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. KK Women's and Children's Hospital, Singapore August 2012.
- 190. Principles of gas exchange: CO<sub>2</sub> elimination, oxygenation, tissue oxygen delivery. IPOKRaTES Clinical Seminar: Neonatal pulmonary critical care. State-of-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. KK Women's and Children's Hospital, Singapore August 2012.
- 191. Modern mechanical ventilation: Overview of basic modes and techniques. IPOKRaTES Clinical Seminar: Neonatal pulmonary critical care. State-of-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. KK Women's and Children's Hospital, Singapore August 2012.
- 192. Volume-targeted ventilation: New paradigm in neonatal ventilation. IPOKRaTES Clinical Seminar: Neonatal pulmonary critical care. State-of-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. KK Women's and Children's Hospital, Singapore August 2012.
- 193. High-frequency ventilation. IPOKRaTES Clinical Seminar: Neonatal pulmonary critical care. Stateof-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. KK Women's and Children's Hospital, Singapore August 2012.
- 194. Essentials of pulmonary physiology and lung mechanics. IPOKRaTES Clinical Seminar: Neonatal pulmonary critical care. State-of-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. Bangkok, Thailand, August 2012.
- 195. Principles of gas exchange: CO<sub>2</sub> elimination, oxygenation, tissue oxygen delivery. IPOKRaTES Clinical Seminar: Neonatal pulmonary critical care. State-of-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. Bangkok, Thailand, August 2012.
- 196. Modern mechanical ventilation: Overview of basic modes and techniques. IPOKRaTES Clinical Seminar: Neonatal pulmonary critical care. State-of-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. Bangkok, Thailand, August 2012.
- 197. Volume-targeted ventilation: New paradigm in neonatal ventilation. IPOKRaTES Clinical Seminar: Neonatal pulmonary critical care. State-of-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. Bangkok, Thailand, August 2012.

- 198. High-frequency ventilation. IPOKRaTES Clinical Seminar: Neonatal pulmonary critical care. Stateof-the-art in respiratory assistance, delivery room care, prevention and treatment of chronic lung disease. Bangkok, Thailand, August 2012.
- 199. Volume Targeting in Mechanical Ventilation. Mechanical Ventilation and BPD Symposium, Royal Prince Alfred Hospital, University of Sydney, Sydney, NSW, Australia, August 2012.
- 200. New Insights in Volume Targeted Ventilation. Grand Rounds, Royal Children's Hospital, University of Melbourne, Melbourne, Victoria, Australia, August 2012.
- 201. Lung-protective strategies of mechanical ventilation. Best of IPOKRaTES: An update in Neonatology. University of Leuven, Leuven, Belgium, September 2012.
- 202. Volume-targeted ventilation yes, but.... Controversies in mechanical ventilation. 4<sup>th</sup> congress of the European Academy of Pediatrics, Istanbul, Turkey, October 2012.
- 203. Neonatal Oxygen Toxicity, Plenary Session Lecture. Congreso Latino Americano de Pediatria ALAPE 2012 in Quito, Ecuador, November 2012.
- 204. New Strategies of Mechanical Ventilation of Newborn Infants. Congreso Latino Americano de Pediatria ALAPE 2012 in Quito, Ecuador, November 2012.
- 205. Bronchopulmonary Dysplasia. Congreso Latino Americano de Pediatria ALAPE 2012 in Quito, Ecuador, November 2012.
- 206. Developing an NICU Ventilation Protocol. Neonatal Update 2013, Imperial College London, London, England, December 2013.
- 207. Volume Guarantee Ventilation. Neonatus 2013 conference, Poznan University of Medical Sciences, Poznan, Poland, May 2013.

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## <u>GRANTS</u>

- 1. Principal Investigator, Trustees of Akron Children's Hospital Research Foundation. "Clinical trial of high frequency jet ventilation in newborn infants", 02/28/1982 02/28/1983
- 2. Principal Investigator, IVAC Corporation equipment grant. "HFJV in an animal model of meconium aspiration". 09/1983
- 3. Principal Investigator, Basic Research Support Grant, Georgetown University. "High frequency jet ventilation in an animal model of meconium aspiration". 04/01/1983-04/30/1984
- 4. Principal Investigator, John Preston Marshall Foundation. "Extracorporeal Membrane Oxygenation". 01/01/1985-01/31/1987
- 5. Co Sponsor of Awardee of Fellowship Grant. American Heart Association, Nation's Capital Affiliate. "Tidal flow veno-venous system for ECMO". 07/31/1986-06/30/1987.
- 6. Principal Investigator, John Preston Marshall Foundation. "Extracorporeal Membrane Oxygenation". 06/01/1987–06/30/1989
- Principal Investigator, American Heart Association, Nation's Capital Affiliate. "A tidal flow veno-venous system for ECMO: Long-term safety" 07/01/1988-06/30/1989 (extended till Sept 1990)
- 8. Site Principal Investigator, Pediatrix Medical Group. "Lung lavage with perfluorocarbons in an animal model of the meconium aspiration syndrome". 04/01/1993-06/30/1994
- 9. Site Principal Investigator, Abbot Laboratories/Ross Laboratories. "Evaluation of Survanta in term infants". 03/01/1994-12/31/1995
- Site Principal Investigator I, Ohmeda Inc. "A double blind, placebo controlled dose response study of inhaled nitric oxide in the treatment of persistent pulmonary hypertension in the neonate". 07/01/1994-06/30/1996
- 11. Principal Investigator, Draeger Inc. "Validation and testing of new Babylog ventilator software". 05/01/1996-09/30/1996.
- 12. Site Principal Investigator, Ohmeda Inc. "Multi-center trial of Nitric Oxide in near-term infants with hypoxemic respiratory failure". 04/01/1996-12/31/1998
- 13. Principal Investigator, Draeger Inc. "Clinical validation and testing of new Babylog ventilator software". 07/01/1997-03/31/1998
- 14. Site Principal Investigator, Acute Therapeutics Inc. (now Discovery Laboratories). "Multi-center randomized controlled trial of KL4 surfactant for treatment of MAS". 07/01/1997-07/31/1999

- Site Principal Investigator, Discovery Laboratories. "Multi-center randomized controlled trial of Surfaxin for treatment of meconium aspiration syndrome". 05/012000-07/31/2001
- 16. Principal Investigator, Draeger Inc. "Randomized trial of the Volume Guarantee mode of ventilation in infants with periodic breathing. 12/01/2001-12/31/2003.
- 17. Site Principal Investigator, Johnson and Johnson, Inc. "A Pharmacokinetic, Pharmacodynamic and Short-term Safety Study of Single and Multiple Day Doses of Rabeprazole Sodium in Neonates and Pre-term Infants with a Corrected Age of Less than 44 Weeks with a Presumptive Diagnosis of GERD". 12/01/2009-12/31/2010.
- Site Co- Principal Investigator Georgetown University, Canadian Institutes of Health Research MCT-80246 (Site CO-PI, Haresh Kirpalani, PI). "Nasal Intermittent Positive Pressure Ventilation in Premature Infants (NIPPV) Trial". 12/01/2009-12/31/2010.
- Alternate (Co)-Principal Investigator, Brown University/WIHRI site. NIH-NICHD U10 HD27904. "NICHD Cooperative Multicenter Neonatal Research Network, 04/01/2011-03/31/2016.
- Subcontract Principal Investigator, NIH Subcontract: R43 HL106366-01, J Vassoughi (PI) "Engineering and Scientific Research Associates". Responsive to RFA-HD-09-017 Safe and Effective Instruments and Devices for Use in the Neonatal Intensive Care Units (SBIR [R43]) "Neonatal APD, a Simple Noninvasive Diagnostic/Monitoring Device for Neonatal ICU". 07/01/2010-06/01/2014.
- 21. Senior/Key Collaborator, Site Principal Investigator, Small Business Innovation Research Grant 1R44HL107000-01; PI, Segal, Robert, Discovery Laboratories. "Development and Utilization of a Novel Aerosol Generating Technology to Deliver Lucinactant, a KL4 Peptide-containing, Synthetic Surfactant for the Prevention of Neonatal Respiratory Distress Syndrome". 01/01/2011-06/01/2014.
- 22. Overall Principal Investigator, Site PI at WIHRI, Draeger Medical, Inc. "Multicenter Clinical Trial of High-frequency Ventilation Using the Draeger VN500 Infant Ventilator in the Treatment of Respiratory Distress Syndrome in Premature Infants". 01/01/2011- 12/31/2015.
- 23. Over all study Co PI, Site PI at WIHRI. "The Delivery Room Recruit Trial." NIH grant 1U01HD072906-01A1. 09/01/13 to 09/01/18.

## UNIVERSITY TEACHING ROLES

- 1982-1987 Annual Infant Resuscitation Workshop, Nurse Midwifery students, Georgetown University
- 1982-1997 Neonatal Nurse Practitioner Program, Georgetown University. Regular 4 Annual Lectures.
- 1988-1992 Ethical issues in neonatal intensive care. Annual lecture/discussion in the Extended European Bioethics Course, The Kennedy Institute of Ethics, Georgetown University, Hans-Martin Sass, Course Director.
- 1984-2009 Course Director, Annual ECMO nursing course ECMO Specialists, Georgetown University.
- 1992-1996 Regular Lecturer, Annual Current Concepts in Pediatric &Neonatal Respiratory Care Symposium, Georgetown University Hospital, Washington, D.C. Topics included:
  - Extracorporeal membrane oxygenation
  - High-frequency jet ventilation
  - Matching ventilator strategies with disease pathophysiology
  - Nitric oxide and the neonate
  - Liquid ventilation in neonatal respiratory failure
  - Treatment of PPHN in 1995
- 1992-2009 Neonatology Grand Rounds, Georgetown University Medical Center, Washington, D.C. Topics included:
  - Treatment of persistent pulmonary hypertension of the newborn.
  - Veno-venous ECMO.
  - Tailoring conventional and high-frequency ventilation strategy to disease pathophysiology.
  - Treatment of PPHN state of the art.
  - Newer approaches to conventional mechanical ventilation.
  - High-frequency ventilation clinical management issues.
  - Volume targeted mechanical ventilation
  - Congenital diaphragmatic hernia
  - Fungal sepsis in the NICU
  - Nitric Oxide treatment of PPHN
  - Therapeutic misadventures in Neonatology
  - Nitric Oxide for prevention of BPD
  - Update on HFV
  - State of the art in mechanical ventilation
  - Principles of gas exchange
  - Oxygen therapy: the Good, the Bad and the Ugly

1992-2008	Course Director, Annual ECMO course, Georgetown University and Uniformed Services
	School of the Health Sciences Neonatology Fellows.

- Dec. 1998 Course Co-Director, Strategies in High-Frequency Ventilation from Neonates through Adults. Didactic course and hands-on workshop. Georgetown University Medical Center.
- June 2003 Advanced Training in Respiratory Care in Neonatology for Draeger Inc. Worldwide Sales Force. Two-day intensive seminar. Lubeck, Germany,
- Sept 2003 High-frequency ventilation workshop and live animal lab demonstration of advanced concepts of mechanical ventilation. Respiratory course in association with European Society for Pediatric Research, Bilbao, Spain.
- Sept 2003 Alternative Strategies for Treatment of Respiratory Failure. Plenary Session, Respiratory course in association with European Society for Pediatric Research, Bilbao, Spain.
- Feb 2006Live animal demonstration of open lung concept/lung volume recruitment in a surfactant<br/>depleted lamb model. Respiratory Assistance, Ventilation and Care of the Newborn Infant.<br/>IPOKRaTES Postgraduate Course on Neonatal Respiratory Support, Bilbao, Spain.
- Feb 2009 Course Director, Mechanical Ventilation: From theory to practice. Two day intensive course with lectures and workshops, University of Cairo, Cairo, Egypt.
- Feb 2009 Course Director, Mechanical Ventilation: From theory to practice. Two day intensive course with lectures and workshops, Benha Children's Hospital, Benha, Egypt.
- 2010-Present Perinatal Management Conferences (Neonatal Grand Rounds), Women and Infants Hospital of RI
  - High-frequency ventilation
  - Delivery room stabilization of preterm infants
  - Inhaled nitric oxide therapy guidelines
  - Volume guarantee ventilation
  - What is new in surfactant therapy?
- 2010-Present Fellows' Conferences
  - Volume Guarantee Ventilation
  - Respiratory Physiology Board Review
  - Extracorporeal Membrane Oxygenation
- 2010-Present Neonatal Core Curriculum Student lectures (repeat x3/year), Women and Infants Hospital
  - Respiratory support I: The basics oxygen therapy, CPAP, non-invasive ventilation
    - Respiratory support II: Conventional mechanical ventilation
    - Respiratory support III: High-Frequency ventilation, iNO, ECMO
- 2010-Present Perinatal Seminar (Monthly Journal Clubs, M&M Conferences, Nutrition seminars, Infectious Disease conferences), Women and Infants Hospital of RI.