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**Education & Training**

1974-1978 Kenyon College, Gambier, Ohio, B.A.

1978-1982 New York University School of Medicine, M.D.

6/1982-6/1983 Internship in Internal Medicine, University of Michigan Health System, Ann Arbor, MI

7/1983-6/1985 Residency in Internal Medicine, University of Michigan Health System, Ann Arbor, MI

7/1986-6/1989 Fellowship in Pulmonary and Critical Care Medicine, Department of Internal Medicine, University of Michigan Health System, Ann Arbor, MI

**Certification and Licensure**

1. Medical Licensure, Michigan 4301047884

1983 Board Certification, National Board of Medical Examiners

1985 Board Certification, American Board of Internal Medicine

1989 Board Certification, Pulmonary Medicine

1990/1999 Board Certification, Critical Care Medicine

**Academic, Administrative, and Clinical Appointments**

*Academic*

7/1985-6/1986 Instructor, Emergency Services, Department of Internal Medicine, University of Michigan Health System, Ann Arbor, MI

7/1988-6/1989 Lecturer, Department of Internal Medicine, Division of Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI

7/1990-6/1997 Clinical Assistant Professor in Internal Medicine, Division of Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI

5/2002-08/2007 Clinical Assistant Professor in Internal Medicine, Division of Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI

09/2007- Clinical Associate Professor in Internal Medicine, Division of Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI

*Administrative*

7/1999-1/2002 Fellowship Program Director, Division of Pulmonary and Critical Care Medicine, Henry Ford Hospital, Detroit, MI

7/2000-4/2002 Secretary/Treasurer Kindred-Detroit Medical Staff

*Clinical*

7/1989-4/2002 Senior Staff Physician, Henry Ford Hospital, Division of Pulmonary and Critical Care Medicine, Detroit, MI

7/1989-6/1990 Associate Director, Medical Intensive Care Unit, Henry Ford Hospital, Detroit, MI

7/1991-1/2002 Director, Medical Intensive Care Unit, Henry Ford Hospital, Detroit, MI

7/1992-6/1998 Director, Medical Intermediate Care Unit, Henry Ford Hospital, Detroit, MI

7/1995-4/2002 Director of Respiratory and Critical Care, Kindred-Detroit Hospital, Detroit, MI

7/1998-6/2000 Director, 6-N Chronic Ventilator/Progressive Care Unit, Henry Ford Hospital, Detroit, MI

5/2002-5/2007 Co-director, Critical Care Medicine Unit, University of Michigan Health System, Ann Arbor, MI

6/2007- Director, Critical Care Medicine Unit, University of Michigan Health System, Ann Arbor, MI

**Research Interests**

1. Acute Respiratory Distress Syndrome
2. Critical Care Outcomes and Quality Improvement
3. Ventilator Associated Pneumonia

**Grants**

1987-1988 American Lung Association of Michigan Training Grant, Co-investigator. $8,333.

1988-1989 American Lung Association of Michigan Training Grant, Co-investigator. $8,333.

1990-1991 Principal Investigator, Henry Ford Hospital Small Projects Funding Committee, "Predictive value of airway occlusion pressure and work of breathing measurements in weaning patients with COPD from mechanical ventilation," $5,000.

1990-1995 Co-Investigator, Clinical Core, “Specialized Center of Research in Interstitial Lung Disease”.

1992-1993 Site Principal Investigator, Genentech, "A multicenter phase II trial of human recombinant DNase (rhDNase) in patients with chronic bronchitis," $87,467.

1992-1996 Principal Investigator, Henry Ford Hospital Small Projects Funding Committee, "High resolution CT analysis in idiopathic pulmonary fibrosis: CT scan correlation with histopathology and prognosis," $10,000.

 1993-1995 Site Principal Investigator, Genentech, "A multicenter, double blind, placebo-controlled study to evaluate the safety and efficacy of aerosolized recombinant human DNaseI in hospitalized patients with chronic bronchitis experiencing acute pulmonary exacerbation," $69,194.

 1993-1994 Site Principal Investigator, Genentech, "A multicenter, prospective survey to evaluate purulent lower respiratory tract exacerbations in the outpatient setting," $3,000.

1995-1996 Site Principal Investigator, Genentech, "A multinational, multicenter, double-blind, placebo-controlled phase III study to evaluate the efficacy and safety of aerosolized recombinant human DNase I in hospitalized patients with chronic obstructive pulmonary disease experiencing a pulmonary exacerbation (COMET),” $40,000.

1995-1998 Co-Investigator, INO Therapeutics, “a double blind, randomized, placebo controlled study of inhaled nitric oxide in the treatment of acute respiratory distress syndrome (ARDS),” $57,961.

1997-1998 Site Principal Investigator, Amgen, “A multi-center, double-blind, randomized, placebo-controlled study of Filgrastim in the treatment of patients with pneumonia and severe sepsis,” $32,000.

1998-2000 Site Principal Investigator, Pharmacia and Upjohn, “Linezolid (PNU-100766) in the treatment of patients with Nosocomial Pneumonia: A double-blind, randomized, comparator-controlled study,” $90,000.

2000-2002 Site Principal Investigator, InterMune, “A Randomized, Double-blind, Placebo-controlled, Phase III Study of the Safety and Efficacy of Subcutaneous Recombinant Interferon gamma-1b (IFN-*y* 1b) in Patients with Idiopathic Pulmonary Fibrosis,” $136,810.

2000-2002 Site Principal Investigator, Genentech, “A Multicenter, Randomized, Controlled, Open-label Study to Evaluate the Safety of Olizumab in Moderate to Severe, Persistent Asthma Subjects Already Treated with Other Therapies (ALTO),” $28,000.

2000-2002 Site Principal Investigator, Genentech, “Observational Study of The Epidemiology and Natural History of Asthma: Outcome and Treatment Regimens (TENOR),” $20,300.

2000-2002 Site Principal Investigator, IntraBiotics, “A Phase I Safety, Tolerability, Acceptability and Microbial Kinetic Study of Topical IB-367 Gel and Rinse in Orally Intubated Patients Receiving Mechanical Ventilation,” $18,215.

2000-2002 Site Principal Investigator, Glaxo-SmithKline, “A Multi-Center, Randomized, Double-Blind, Double-Dummy, Parallel Group, 8 Week Comparison of Salmeterol Xinafoate Versus Salmeterol Xinafoate plus Ipratroprium Bromide Versus Placebo in Subjects with Chronic Obstructive Pulmonary Disease,” $40,800.

2001-2002 Site Co-Investigator, Eli Lilly and Co. “A Phase IIb Study to Determine the Efficacy and Safety of LY315920 in Patients with Severe Sepsis,”

2001-2003 Site Principal Investigator, Discovery Laboratories, Inc. “A Multicenter, Randomized, Controlled Trial Comparing The Safety and Effectiveness of SurfaxinÒ (Lucinactant) Delivered VIA Bronchopulmonary Segmental Lavage to Standard of Care in Patients With Acute Respiratory Distress Syndrome (ARDS).”

2002-2003 Co-Investigator, Clinical Core, “Specialized Center of Research on Acute Lung Injury” (RFA 96-HL-014), University of Michigan Division of Pulmonary and Critical Care Medicine, $57,441.

2003-2004 Site Principal Investigator, Wyeth, “A Double-blind, Placebo-controlled, Randomized Study of the Efficacy and Safety of Etanercept in Patients with Idiopathic Pulmonary Fibrosis, $80,548.

2003-2004 Site Principal Investigator, IntraBiotics, “A Phase II/III Multicenter, Multinational, Randomized, Double-blind, Placebo Controlled Clinical Trial to Evaluate the Safety and Efficacy of Iseganan HCL Oral Solution in Preventing Ventilator-associated Pneumonia when Administered Orally to Intubated Patients Receiving Mechanical Endotracheal Ventilation, $296,470.

2002-2005 Lead Faculty for Pulmonary and Critical Care, “Comprehensive Programs to Strengthen Physicians' Geriatrics Training," D.W. Reynolds Foundation, $75,000.

2002-2005 Co-Investigator, NIH NHLBI ARDS Clinical Trials Network. “Late Steroid Rescue Study: The Efficacy of Corticosteroids as Rescue for the Late Phase of Acute Respiratory Distress Syndrome,” and “Prospective, Randomized, Multi-Center trial of ‘Fluid Conservative vs. ‘Fluid Liberal’ Management of Acute Respiratory Distress.” Total contract amount $2,708,312.

2005-2006 Site Principal Investigator, Pfizer, “Linezolid in the Treatment of Subjects with Nosocomial Pneumonia Proven to be Due to Staphlococcus aureus.”

2004-2007 Site Principal Investigator, Bard Corporation, “Multi-center Trial of Bard Silver-coated Endotracheal Tube to Reduce Ventilator Associated Pneumonia, $131,360.

2004-2008 Principal Investigator, University of Michigan General Clinical Research Center, “Chest CT in an observational study of patients with acute lung injury and acute respiratory distress syndrome,” $75,000.

2004-2008 Co-investigator, University of Michigan General Clinical Research Center, “Chest CT in a randomized placebo controlled trial of recombinant GM-CSF in patients with acute lung injury and acute respiratory distress syndrome,” $75,000.

2003-2009 Principal Investigator, Core A; NIH/NHLBI Specialized Centers of Clinically Oriented Research (SCCOR) in Translational Research in Acute Lung Injury, Core A: Clinical Core 1 P50 HL 60289-03.

2003-2009 Principal Investigator, Clinical Core, NIH/NHLBI Specialized Center of Clinically Oriented Research (SCCOR) in Translational Research in Acute Lung Injury, University of Michigan Division of Pulmonary and Critical Care Medicine, total award (year 1) $2,641,027, Clinical Core award (year 1 $920,021).

2007-2009 Principal Investigator, Project 5; A Randomized Trial of GM-CSF in Patients with ALI. NIH/NHLBI Specialized Centers of Clinically Oriented Research (SCCOR) in Translational Research in Acute Lung Injury, Core A: Clinical Core 1 P50 HL 60289-03.

2007-2009 Principal Investigator, Project 5 A Randomized Trial of GM-CSF in Patients with ALI, NIH/NHLBI Specialized Center of Clinically Oriented Research (SCCOR) in Translational Research in Acute Lung Injury (P50-HL074024), University of Michigan Division of Pulmonary and Critical Care Medicine, Project 5 award (total current year $272,939).

2007-2008 Co- Investigator, Air Force, Department of Defense FA7014-07-C-A010, Risk Factors, Prognostic Factors, Management of ARDS, $31,200.

2010-2015 Site Principal Investigator, “The Modifying the Impact of ICU-Associated Neurological Dysfunction-USA Study (MIND-USA),” Ely (PI), 1 R01 AG035117-01. 92,703.58.

2010-2013 Site Principal Investigator, “Study of Ganciclovir/Valganciclovir for Prevention of Cytomegalovirus Reactivation in Acute Injury of the Lung (GRAIL),” Limaye/Boeckh (PI), U01HL102547. $253,113.

2011-2013 Site Principal Investigator, Mathematical modeling of disease progression in patients at risk for sepsis: A prospective cohort study, Immunetrics Inc. $108,000.

**Honors and Awards**

1997-1998 Henry Ford Hospital, Third Year Medical Student Teaching Award

1999 Henry Ford Medical Group Outstanding Patient Satisfaction in Clinical Care

* 1. Kenyon College Alumni Admissions Award

2004 ARDS Foundation Physician’s List

2006 Hour Detroit Magazine “Top Docs” list in Pulmonology and Respiratory/Pulmonary Care

2007 Outstanding Faculty Award, presented by University of Michigan Pulmonary and Critical Care Fellows Class of 2007

1. Society of Critical Care Medicine Presidential Citation
2. Society of Critical Care Medicine Presidential Citation

2009 Annals of Internal Medicine top 30% reviewer

1. Outstanding Educator Award, presented by University of Michigan Pulmonary and Critical Care Fellows Class of 2010

2010 H. Marvin Pollard Award for Outstanding Resident Teaching, University of Michigan Department of Internal Medicine

2010 D. Robert McCaffree, MD, Master FCCP Humanitarian Award for a community service project entitled, “Toward a Sustainable Model of Care Delivery to the Indigent of Belen, Peru.”

2010 Society of Critical Care Medicine Presidential Citation

1. Society of Critical Care Medicine Presidential Citation
2. Ann Arbor Rotary Club Ambassador of Goodwill Award

2012 Society of Critical Care Medicine Presidential Citation

**Memberships in Professional Societies**

 1989- Fellow, American College of Chest Physicians

 1989- Member, American Thoracic Society

 1989-2011 Member, American College of Physicians

 1990- Member, Society of Critical Care Medicine

1. Member, Michigan Thoracic Society
2. Fellow, American College of Critical Care Medicine
3. Fellow, American College of Physicians

2011- Honorary Member, Association Colombiana de Neumologia y Cirugia de Torax

**Editorial Positions, Boards, and Peer-Review Service**

1994-2008, 2011 Ad hoc reviewer, Chest

2002, 2009-2013 Ad hoc reviewer, Annals of Internal Medicine

2003, 2005 Ad hoc reviewer, Critical Care Medicine

2003-2008 Ad hoc reviewer, American Journal of Respiratory and Critical Care Medicine

2009-2011 Ad hoc reviewer, Respiratory Medicine

2010-2011 Ad hoc reviewer, Respiratory Care

2011 Ad hoc reviewer, Critical Care

**Teaching**

 Local:

9/20/1989 Henry Ford Hospital Seminars in Pulmonary and Critical Care Medicine, "Diaphragmatic Fatigue and Ventilatory Failure”

4/11/1990 Henry Ford Hospital Seminars in Pulmonary and Critical Care Medicine, "Pulmonary Eosinophilic Syndromes”

7/13/1990 Henry Ford Hospital Internal Medicine Lecture, "Acute Respiratory Failure”

10/18/1990 Henry Ford Hospital 75th Anniversary Scientific Sessions, "Respiratory Muscle Function”

3/6/1991 Henry Ford Hospital Seminars in Pulmonary and Critical Care Medicine, "Idiopathic Pulmonary Fibrosis”

7/10/1991 Henry Ford Hospital Internal Medicine Lecture, "Acute Respiratory Failure”

2/13/1992 Henry Ford Hospital Critical Care Grand Rounds, "ARDS and Ventilator Induced Lung Injury”

07/1992 Henry Ford Hospital Internal Medicine Lecture, "Acute Respiratory Failure”

10/6/1992 University of Michigan Internal Medicine Lecture, Ann Arbor, MI; "Atypical Pneumonia and Tracheobronchitis”

10/22/1992 Henry Ford Hospital Medical Grand Rounds, "Acute Interstitial Pneumonia”

11/23/1992 Henry Ford Hospital Internal Medicine Lecture, "Interstitial Lung Disease”

11/30/1992 Henry Ford Hospital Internal Medicine Lecture, "Mechanical Ventilation and Weaning”

5/25/1993 Henry Ford Hospital Critical Care Grand Rounds, "Noninvasive Mechanical Ventilation”

7/7/1993 Henry Ford Hospital Internal Medicine Lecture, "Acute Respiratory Failure”

2/23/1994 Henry Ford Hospital Internal Medicine Lecture, "Adult Respiratory Distress Syndrome”

2/25/1994 Henry Ford Hospital Internal Medicine Lecture, "Mechanical Ventilation and Weaning”

5/18/1994 Henry Ford Hospital Critical Care Grand Rounds, "Hemodynamic Effects of Positive Pressure Ventilation”

7/12/1994 Henry Ford Hospital Internal Medicine Lecture, "Acute Respiratory Failure”

1/11/1995 Henry Ford Hospital Critical Care Grand Rounds, "ICU Scoring Systems”

2/23/1995 Henry Ford Hospital Internal Medicine Lecture, "ARDS”

2/25/1995 Henry Ford Hospital Internal Medicine Lecture, "Mechanical Ventilation”

8/9/1995 Henry Ford Hospital Internal Medicine Lecture, "Acute Respiratory Failure”

7/16/1996 Henry Ford Hospital Internal Medicine Lecture, "Acute Respiratory Failure”

10/10/1996 Henry Ford Hospital Medical Grand Rounds, "ARDS”

5/8/1996 Henry Ford Hospital Critical Care Grand Rounds, "Up-To-Date in Mechanical Ventilation”

7/18/1997 Henry Ford Hospital Internal Medicine Lecture, “Asthma”

10/20/1997 Henry Ford Hospital Medical Grand Rounds, "Management of Sepsis”

3/4/1998 Henry Ford Hospital Critical Care Medicine Grand Rounds, "Non-invasive Positive Pressure Ventilation: 1998”

5/6/1998 Henry Ford Hospital Critical Care Medicine Grand Rounds, "Ventpath”

6/13/1998 Henry Ford Hospital Clinical Update in Pulmonary Medicine, Hyatt Regency Hotel, Dearborn, MI; "Asthma and COPD”

7/10/1998 Henry Ford Hospital Internal Medicine Lecture, "Asthma”

12/15/1999 Henry Ford Hospital Division of Infectious Diseases Seminar, "Management of Sepsis”

12/23/1999 Vencor-Detroit Annual Staff Meeting, Allen Park, MI; "Medical Futility”

2/2/2000 Henry Ford Hospital Critical Care Grand Rounds, “Management of Sepsis”

7/26/2000 Henry Ford Hospital Division of Pulmonary and Critical Care Medicine Journal Club, “Are Elderly Patients with Obstructive Lung Disease being Prematurely Discharged?”

9/7/2000 Henry Ford Hospital Internal Medicine Lecture, “Asthma”

11/28/2000 Henry Ford Hospital Pulmonary and Critical Care Medicine Research Conference, “Gamma Interferon 1-b in the Treatment of Idiopathic Pulmonary Fibrosis”

11/29/2000 Henry Ford Hospital Division of Cardiology Seminar, “ Mechanical Ventilation and Weaning”

12/6/2000 Henry Ford Hospital Critical Care Grand Rounds, “What’s New in Mechanical Ventilation”

1/4/2001 Henry Ford Hospital Department of Emergency Medicine Journal Club, “Noninvasive Positive Pressure Ventilation”

1/20/2001 Henry Ford Hospital Department of Family Practice Grand Rounds, “Asthma”

6/6/2001 Henry Ford Hospital Critical Care Grand Rounds, “Sedation in the Medical ICU”

8/9/2001 Henry Ford Hospital Internal Medicine Lecture, “Asthma”

10/29/2001 Henry Ford Hospital Department of Internal Medicine Journal Club, “The PROWESS Trial”

1/9/2002 Henry Ford Hospital Critical Care Grand Rounds, “Beyond the ARDSnet: The Search for Meaningful Subgroups”

7/11/2002 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Management of Sepsis”

8/7/2002 University of Michigan Internal Medicine Resident Lecture, “Management of Sepsis”

Fall 2002 University of Michigan Medical School M-1Clinical Preceptor

8/20/2002 University of Michigan Pulmonary and Critical Care Medicine Fellow’s Conference, “Community Acquired Pneumonia”

10/2/2002 University of Michigan Internal Medicine Resident Lecture, “Medical Ethics in the ICU”

10/11/2002 University of Michigan CCMU Nursing Educational Workshop, “Medical Ethics in the ICU”

11/7/2002 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

11/15/2002 University of Michigan Medical School M-1 Respiratory Sequence, “Acute Respiratory Distress Syndrome”

1/6/2003 University of Michigan Internal Medicine Resident Lecture, “Acute Respiratory Distress Syndrome”

2/6/2003 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

5/1/2003 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

6/4/2003 University of Michigan Internal Medicine Resident Lecture, “Assessing ICU Outcomes”

7/2/2003 University of Michigan Internal Medicine Resident Lecture, “Management of Sepsis”

7/29/2003 University of Michigan Pulmonary and Critical Care Medicine Fellow’s Lecture, “Geriatrics”

8/14/2003 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

9/15-16/2003 Co-Director, “16th Annual Update on Pulmonary and Critical Care Medicine”, Towsley course, University of Michigan Health System, Ann Arbor, MI

11/6/2003 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

10/22/2003 University of Michigan CCMU Nursing Educational Workshop, “ARDS”

2/6/2004 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

3/16/2004 University of Michigan SICU Nursing Educational Workshop, “ARDS”

5/6/2004 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

8/5/2004 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

8/10/2004 University of Michigan Pulmonary and Critical Care Medicine Fellow’s Lecture, “Pulmonary Embolism”

8/11/2004 University of Michigan Internal Medicine Resident Lecture, “Acute Respiratory Distress Syndrome”

8/25/2004 University of Michigan Internal Medicine Resident Lecture, “Surviving Sepsis”

10/4-5/05/2004 Director, “17th Annual Update on Pulmonary and Critical Care Medicine”, Towsley course, University of Michigan Health System, Ann Arbor, MI

10/28/2004 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

12/20/2004 University of Michigan Internal Medicine Resident Lecture, “Pulling the Plug: Withdrawal of Life Support in the Intensive Care Unit”

2/1/2005 University of Michigan Hospital Critical Care Medicine Unit nursing in service, “Management of Sepsis”

2/24/2005 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

3/1/2005 University of Michigan Hospital Critical Care Medicine Unit nursing in service, “Management of Sepsis”

4/14/2005 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

7/20/2005 University of Michigan Internal Medicine Resident Lecture, “Management of Sepsis”

8/22/2005 University of Michigan Internal Medicine Resident Lecture, “Acute Respiratory Distress Syndrome”

9/7/2005 University of Michigan SICU Core Curriculum Lecture, “Acute Respiratory Distress Syndrome”

10/10-11/2005 Director, “18th Annual Update on Pulmonary and Critical Care Medicine”, Towsley course, University of Michigan Health System, Ann Arbor, MI

10/14/2005 University of Michigan CCMU Nursing Educational Workshop”

10/21/2005 University of Michigan CCMU Nursing Educational Workshop, “Assessing ICU Outcomes”

10/25/2005 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

1/31/2006 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

7/21/06 University of Michigan Internal Medicine Morning Report, “Sarcoidosis”

7/24/06 University of Michigan Internal Medicine Resident Lecture, “Sepsis”

7/25/2006 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

9/6/06 University of Michigan SICU Core Curriculum Lecture, “Acute Respiratory Distress Syndrome”

9/26-26/2006 Director, “19th Annual Update in Pulmonary and Critical Care Medicine”, Towsley course, University of Michigan Health System, Ann Arbor, MI

10/2/2006 University of Michigan Internal Medicine Resident Lecture, “Acute Respiratory Distress Syndrome”

10/31/2006 University of Michigan Division of Pulmonary and Critical Care Medicine Fellow’s Conference, “What’s New in Critical Care”

11/13/2006 University of Michigan Internal Medicine Resident Lecture, “Mechanical Ventilation and Weaning”

11/21/2006 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

12/12/2006 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Role of Corticosteroids in Sepsis and ARDS”

2/6/2007 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

5/2/2007 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

5/7/2007 University of Michigan Internal Medicine Morning Report, “Sepsis”

5/15/2007 University of Michigan SICU/CCMU Nursing Education Day, “Treatment of Acute Respiratory Failure in Asthma”

7/16/2007 University of Michigan Schwartz Rounds, “Patient Autonomy: Have we gone too Far?”

8/7/2007 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

 9/10/2007 University of Michigan Internal Medicine Morning Report, “Sarcoidosis”

9/21/2007 University of Michigan Second Year Medical Student Respiratory Sequence Clinical Problems teaching session

10/2/2007 University of Michigan Second Year Medical Student Pulmonary Clinic session

11/6/2007 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

12/12/2007 University of Michigan Department of Emergency Services Grand Rounds, “Management of Sepsis”

1/9/2008 University of Michigan Internal Medicine Morning Report, “Hemoptysis”

1/22/2008 Division of Rheumatology Core Curriculum Conference, “Acute Respiratory Distress Syndrome”

2/5/2008 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

6/4/2008 University of Michigan Internal Medicine Resident Lecture, “Acute Respiratory Distress Syndrome”

7/17/08 University of Michigan Internal Medicine Morning Report, “Hypersensitivity Pneumonitis”

8/13/08 University of Michigan Department of Surgery, Surgical Critical Care Core Curriculum Lecture, “Acute Respiratory Distress Syndrome”

8/15/08 University of Michigan Medical School M-1 Luncheon Roundtable, “Amazon Promise: Medical work in Peru”

8/25/08 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

11/11/2008 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

1/27/09 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

4/7/09 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

5/4/09 University of Michigan Internal Medicine Morning Report, “Malignant Hyperthermia”

7/1/2009 University of Michigan Internal Medicine Resident Lecture, “Acute Respiratory Distress Syndrome”

7/20/2009 University of Michigan Internal Medicine Resident Lecture, “Sepsis”

7/22/2009 University of Michigan Internal Medicine Morning Report, “CA-MRSA Pneumonia”

8/25/2009 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

8/28/2009 Discussant, Department of Medicine Grand Rounds, University of Michigan, “M and M: H1N1 Acute Respiratory Failure”

8/28/2009 University of Michigan School of Medicine Third Year lecture, “Salt, Water and Life as We Know It”

9/11/2009 University of Michigan School of Medicine Second Year Respiratory Sequence, “Sepsis”

10/9/2009 University of Michigan School of Medicine Third Year lecture, “Primum non nocere”

10/15/2009 University of Michigan Internal Medicine Morning Report, “Sarcoidosis”

12/1/2009 University of Michigan Pulmonary and Critical Care Fellow’s Conference, “Sepsis”

1/18/2010 University of Michigan Internal Medicine Morning Report, “Neuroleptic Malignant Syndrome”

1/29/2010 Discussant, Department of Medicine Grand Rounds, University of Michigan, “M and M: Respiratory failure rescue modalities”

4/8/2010 University of Michigan Internal Medicine Morning Report, “Medical Ethics”

4/20/2010 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

6/14/2010 University of Michigan Internal Medicine Resident Lecture, “Amazon Promise: Or, how I learned to stop worrying and swim with piranha”

7/27/10 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

10/11/2010 University of Michigan Internal Medicine Morning Report.

10/19/2010 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

1/11/2011 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

3/14/2011 University of Michigan Internal Medicine Morning Report, “PCP Pneumonia”

6/28/2011 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

8/2/2011 Surgical Critical Care Core Curriculum lecture, “Acute Respiratory Distress Syndrome”

8/12/2011 University of Michigan Internal Medicine Morning Report, “Acute Eosinophilic Pneumonia”

9/6/2011 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

12/6/2011 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

1/10/2011 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Management of Sepsis”

3/8/2011 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

6/12/2011 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

7/3/2012 University of Michigan Division of Pulmonary and Critical Care Medicine First Year Fellows Orientation Lecture, “Management of Sepsis”

8/22/2012 Surgical Critical Care Core Curriculum lecture, “Acute Respiratory Distress Syndrome”

9/8/2012 University of Michigan Internal Medicine Morning Report, “Acute Eosinophilic Pneumonia”

11/14/2012 Global Health and Disparities Path of Excellence Medical Student Program Meet the Doctor session

12/10/2012 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

3/12/2013 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Morbidity and Mortality Conference”

 Regional:

4/20/1990 Program Chairman, American Lung Association of Michigan Annual Scientific Session

11/15/1990 Providence Hospital Grand Rounds, Southfield, MI; "Adult Respiratory Distress Syndrome”

2/11/1991 St. Joseph's Hospital Grand Rounds, Pontiac, MI; "Adult Respiratory Distress Syndrome”

3/12/1991 St. Mary's Hospital Grand Rounds, Saginaw, MI; "Recent Developments in Mechanical Ventilation”

10/14/1991 St. Joseph's Hospital Grand Rounds, Pontiac, MI; "Interstitial Lung Disease”

5/11/1992 Ann Arbor VA Internal Medicine Grand Rounds, Ann Arbor, MI; "Advances in Smoking Cessation”

5/7/1992 Hurley Hospital Family Practice Grand Rounds, Flint, MI; "Advances in Smoking Cessation”

9/23/1992 Beyer Hospital Grand Rounds, Ypsilanti, MI; "Advances in Smoking Cessation”

10/20/1993 Bronson Hospital Grand Rounds, Kalamazoo, MI; "Adult Respiratory Distress Syndrome”

3/20/1996 Consortium for Graduate Medical Osteopathic Training (COGMET) Lecture, Lansing, MI; "Acute Respiratory Failure"

3/28/1996 Consortium for Graduate Medical Osteopathic Training (COGMET) Lecture, Lansing, MI; "Permissive Hypercapnic Ventilation"

10/2/1996 Bronson Hospital Grand Rounds, Kalamazoo, MI; "Mechanical Ventilation and Weaning"

11/17/1997 St. Joseph's Hospital Grand Rounds, Pontiac, MI; "Management of Sepsis”

2/18/1999 Providence Hospital Grand Rounds, Southfield, MI; "Asthma”

5/23/2000 Terre Haute Regional Hospital Grand Rounds, Terre Haute, IN; “Management of Asthma”

6/22/2001 William Beaumont Hospital Internal Medicine Lecture, Royal Oak, MI, “Idiopathic Interstitial Pneumonia”

10/10/2001 Medical College of Ohio Internal Medicine Grand Rounds, St. Vincent’s Hospital, Toledo, Ohio, “Management of Sepsis”

11/12/2001 Mid-Michigan Hospital Grand Rounds, Midland, Michigan, “Management of Sepsis”

1/10/2002 Henry Ford Riverside Hospital Grand Rounds, “Management of Sepsis”

2/5/2002 Bixby Hospital Grand Rounds, Adrian, Michigan, “Management of Sepsis”

3/27/2002 William Beaumont Hospital Internal Medicine Grand Rounds, Royal Oak, MI, “Interstitial Lung Disease”

4/1/2002 Pontiac Osteopathic Hospital Grand Rounds, Pontiac, Michigan, “Management of Sepsis”

4/9/2002 Pulmonary Conference, Detroit VA, Detroit Medical Center, “Idiopathic Interstitial Pneumonia”

4/16/2002 St. Joseph Hospital Grand Rounds, Pontiac, Michigan, “Management of Sepsis”

7/25/2002 Spectrum Health System Grand Rounds, Grand Rapids, Michigan, “Management of Sepsis”

2/18/2003 Sinai-Grace Hospital Internal Medicine Resident Conference, Detroit, Michigan; “Allergic Rhinitis”

3/12/2003 Wyandotte Hospital Grand Rounds, Wyandotte, Michigan, “Management of Sepsis”

4/10/2003 Lakeland Hospital Grand Rounds, St. Joseph, Michigan, “Management of Sepsis”

4/30/2003 Washetnaw County Nurses Association, Ann Arbor, Michigan, “Management of Sepsis”

6/24/2003 St. Joseph Hospital General Surgery House Officer Lecture, “Management of Sepsis”

9/15-16/2003 Course Director, 16th Annual Update on Pulmonary and Critical Care Medicine, Ann Arbor, Michigan

12/1/2003 Oakwood Hospital Department of Pharmacy Lecture, Dearborn, Michigan, “Pseudomonas and Acinetobacter Infections”

12/19/2003 St. Josepsh’s West Hospital House Officer Lecture, Macomb, Michigan, “Pseudomonas and Acinetobacter Infections”

1/10/2004 Oakwood Southshore Hospital House Officer Lecture, Trenton, Michigan, “Vancomycin Resistant Enterococcus”

2/4/2004 Garden City Hospital Critical Care Lecture, “Hospital Acquired Pneumonia”

6/1/2004 Flower Hospital Multidisciplinary Conference, Sylvania, Ohio, “Treatment of Persistent Asthma”

6/15/2004 Covenant Hospital Grand Rounds, Saginaw, Michigan, “Acute Respiratory Distress Syndrome”

8/18/2004 Sinai-Grace Hospital Internal Medicine Resident Conference, Detroit, Michigan; “Pseudomonas Infections and Antibiotic Resistance”

9/8/2004 Oakwood Annapolis Hospital Grand Rounds, Wayne, Michigan, “Management of COPD”

10/4-5/2004 Course Director, 17th Annual Update on Pulmonary and Critical Care Medicine, Ann Arbor, Michigan

1/31/27005 Wayne State University Division of Pulmonary and Critical Care Medicine, Clinical Conference, Detroit, Michigan, “Endotracheal Tube Management”

2/15/2005 Saginaw Covenant Hospital Grand Rounds, Saginaw, Michigan, “Ventilator Associated Pneumonia.”

4/7/2005 Saginaw VA Hospital Grand Rounds, Saginaw, Michigan, “Treatment of Persistent Asthma.”

6/10/2005 MacLaren Hospital Grand Rounds, Flint, Michigan, “Treatment of Persistent Asthma”

7/27/2005 Memorial Healthcare Center Grand Rounds, Owosso, Michigan, “Treatment of Persistent Asthma”

8/9/2005 Mansfield Hospital Grand Rounds, Mansfield, Ohio, “Treatment of Persistent Asthma”

8/31/2005 Sparrow Hospital Grand Rounds, Lansing, Michigan, “Acute Respiratory Distress Syndrome”

3/20/2005 Henry Ford Hospital Wyandotte Resident Lecture, Wyandotte, Michigan, “Management of Sepsis”

10/10-11/2005 Course Director, 18th Annual Update on Pulmonary and Critical Care Medicine, Ann Arbor, Michigan

3/29/2006 St. Mary’s Hospital Grand Rounds, Livonia, Michigan, “Management of Sepsis”

7/19/2006 Oakwood Annapolis Critical Care Update, Romulus, Michigan, “Hospital Acquired Pneumonia”

8/19/2006 Mount Clemons General Hospital Grand Rounds, “Ventilator Associated Pneumonia”

9/25-26/2006 Course Director, 19th Annual Update in Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI

10/10/2006 Keystone ICU Meeting, Dearborn, Michigan, “Keystone ICU: VAP, Sepsis and Care and Communication – Moving Forward”

10/27/2006 Michigan State Medical Society Annual Meeting, Troy, Michigan, “The Systemic Inflammatory Response Syndrome”

11/6/2006 Chelsea Community Hospital Grand Rounds, Chelsea, Michigan, “Management of Sepsis”

12/1/2006 Bi-County Hospital, Warren, Michigan, “HAP, VAP and HCAP”

1/18/2007 Ingham Regional Hospital, Lansing, Michigan, “HAP, VAP and HCAP”

3/27/2007 William Beaumont Hospital Internal Medicine Resident Lecture, Royal Oak, MI, “HAP, VAP and HCAP”

7/20/2007 Sparrow Hospital Resident Lecture, Lansing, MI, “Management of COPD”

9/25-26/2007 Course Director, 20th Annual Update in Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI

10/2-3/2008 Course Director, 21th Annual Update in Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI

11/25/2008 Ingham Regional Medical Center, Lansing, MI, “Catheter Related Bloodstream Infections”

10/1-2/2009 Course Director, 22th Annual Update in Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI

9/30-10/1/2010 Course Director, 23th Annual Update in Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI

3/7/2011 Henry Ford Hospital, Detroit, MI. Fundamentals of Critical Care Support, “Mechanical Ventilation-1,” “Mechanical Ventilation-2,” “Airway Management Skills Station.”

9/27/2011 M-1 Clinic Preceptor

9/29-30/2011 Course Director, 24th Annual Update in Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI

4/19/2012 Oakwood Southshore Hospital, Fundamentals of Critical Care Support, “Airway Management”

4/19/2012 Oakwood Southshore Hospital, Fundamentals of Critical Care Support, “Cardiopulmonary/Cerebral Resuscitation”

4/19/2012 Oakwood Southshore Hospital, Fundamentals of Critical Care Support, “Mechanical Ventilation-I”

4/19/2012 Oakwood Southshore Hospital, Fundamentals of Critical Care Support, “Acute Coronary Syndromes”

National:

10/24/1997 Norwalk Hospital Pulmonary Rounds, Norwalk, CT; "Management of Sepsis”

9/7/1999 Alleghany General Hospital Internal Medicine Lecture, Pittsburgh, PA; "Asthma”

3/14/2001 Norwalk Hospital Pulmonary Rounds, Norwalk, CT; “Sedation in the Medical ICU”

5/9/2001 University of North Dakota Internal Medicine Grand Rounds, Grand Forks, ND, “Asthma”

5/21/2003 Facilitator, Thematic Poster Session, American Thoracic Society Annual Meeting, Seattle, Washington, “Mechanical Ventilation II”

8/3/2004 Bay Medical Center Grand Rounds, Panama City, Florida, “Difficult to Treat Asthma”

5/4/2007 Norwalk Hospital Pulmonary Rounds, Norwalk, CT, “HAP, VAP and HCAP”

6/11/2007 University of Cincinnati Pulmonary Rounds, “HAP, VAP and HCAP”

12/5/2007 Northwestern University Pulmonary Conference, “Assessing ICU Outcomes: Keystone ICU”

7/12/2009 Society of Critical Care Medicine Critical Care Academy, San Francisco, CA, Presenter, “Overview of the ABIM Maintenance of Certification Program”

3/4/2010 Banner Desert Medical Center, Mesa, AZ, “Managing Acute Respiratory Failure in this Time of Influenza”

5/17/2011 American Thoracic Society International Conference, Denver, CO, Lead Facilitator, Thematic poster session, “Intensive Care Unit Management and Outcomes”

5/18/2011 American Thoracic Society International Conference, Denver, CO, Lead Facilitator, Thematic poster session, “Case reports: Clinical Problems in Critical Care Medicine”

5/18/2011 American Thoracic Society International Conference, Denver, CO, Session Chair, Poster Discussion session, “Mechanical Ventilation”

7/13/2011 Stamford Hospital Grand Rounds, “A Managed Death: End of Life Decision Making in the ICU,” Stamford, CT

1/20/2013 Society of Critical Care Medicine Congress, San Juan, Puerto Rico, Professor Walk Rounds, “ICU Administration-4”

2/1/2013 Norwalk Hospital Fellow’s Conference, Norwalk, CT; “Ventilator Associated Condtions.”

International:

9/4-28/2008 University of Michigan Global Reach M-4 Elective, Loreto, Peru

2/6-23/2009 University of Michigan Global Reach M-4 Elective, Loreto, Peru

5/6-7/2009 Course Director and Faculty, San Salvador, El Salvador, Fundamentals of Critical Care Support

5/8-9/2009 Course Director and Faculty, San Salvador, El Salvador, Fundamentals of Critical Care Support

2/6-29/2010 University of Michigan Global Reach M-4 Elective, Loreto, Peru

9/4-18/2010 University of Michigan M-4 Elective, Andoas, Peru

2/4-26/2011 University of Michigan Global Reach M-4 Elective, Loreto, Peru

7/28-29/2011 Course Consultant and Faculty, San Jose, Costa Rica, Fundamentals of Critical Care Support

2/10-3/4/2012 University of Michigan Global Reach M-4 Elective, Loreto, Peru

6/14-15/2012 Course Consultant and Faculty, San Salvador, El Salvador, Fundamentals of Critical Care Support

2/9-3/4/2013 University of Michigan Global Reach M-4 Elective, Loreto, Peru

**Committee, Organizational, and Volunteer Service**

Institutional:

* 1. Infection Control Committee, Henry Ford Hospital

1991-1999 Institutional Critical Care Committee, Henry Ford Hospital

 1992-1999 Chairman

1992-2002 Intensive Care Executive Committee, Henry Ford Hospital

 1996-1999 Associate Chairmen

 2000-2002 Chairman

1995-1997 Institutional Biomedical Ethics Committee, Henry Ford Hospital

* 1. Kindred Detroit Ethics Committee

1998-2002 Co-chairman

1998 Henry Ford Health System Ad Hoc Trustee Advisory Committee

2002- Co-chairman, University of Michigan Intensive Care Unit Steering Committee

* 1. University of Michigan Ethics Committee

2003- Department of Internal Medicine House Officer Selection Committee

2003- Medical School Admissions Committee

* 1. M-Care Quality Improvement Committee

2008- Department of Internal Medicine Faculty Performance and Compensation Committee

2008-2010 University of Michigan Hospital Clinical Advisory Team

2011- Clinical and Educational Conflict of Interest Committee

Regional:

2001-2002 Chairman, Michigan Health and Safety Coalition Expert Panel on ICU Staffing

2003- Steering Committee, Keystone ICU Project, Keystone Center for Patient Safety and Quality, Michigan Hospitals Association

2003-2006 Publications co-chair, Keystone ICU Project, Keystone Center for Patient Safety and Quality Michigan Hospitals Association

2002-2007 State of Michigan Department of Community Health Adult Asthma Mortality Review Panel

2007- 2013 Member, Michigan Health and Hospitals Association Keystone Center Advisory Committee

2013- Member, Michigan Health and Hospitals Association Keystone Center Board of Directors

 National:

2002-2010 Steering Committee, Partnership for Excellence in Critical Care

2002-2005 Clinician Advisory Panel, Leapfrog Group for Patient Safety

2006-2007 Society of Critical Care Medicine Performance Improvement Modules Task Force

2007-2011 American College of Chest Physicians Quality Improvement Committee

2007-2012 American College of Critical Care Medicine Credentials Committee, Chair 2011-2012

2008 American Thoracic Society Program Review Subcommittee

2008-2012 Agency for Healthcare Research and Quality Technical Advisory Panel, National Implementation of the Comprehensive Unit-Based Safety Program

(CUSP) to Reduce Central-Line Associated Blood Stream Infections (CLABSI) in the ICU

2009- Society of Critical Care Medicine Critical Care Congress Program Committee

2009- Society of Critical Care Medicine Fundamentals of Critical Care Support Program Steering Committee

* 1. American Thoracic Society Ad hoc Committee on Therapeutic Hypothermia

2010 Scientific Program Review Committee, Guidelines International Network Conference 2010

1. American Thoracic Society Quality Improvement Committee
2. American College of Chest Physicians Guidelines Oversight Committee

2011- American College of Chest Physicians Critical Care Network Steering Committee

2012-2013 American College of Chest Physicians Critical Care Focus Group

2012-2013 American Board of Internal Medicine “Choosing Wisely” Critical Care Taskforce

2012- Society of Critical Care Medicine Taskforce for Hospitalist certification in Critical Care

2012- Institute of Medicine Roundtable on Value and Science-Driven Health Care: Systems Approaches for Improving Health Innovation Collaborative

2012- American College of Critical Care Medicine Guidelines Management Committee

Volunteer:

* 1. Kenyon College Class Agent, class of 1978

2007 Amazon Promise Volunteer, Iquitos, Peru, October 6-13

2008- Amazon Promise Medical Director and Board Member

1. Amazon Promise Volunteer, Iquitos, Peru, September 4-28
2. Amazon Promise Volunteer, Saramiriza, Peru, February 6-23
3. Amazon Promise Volunteer, Iquitos, Peru February 6-26

2010 Amazon Promise Volunteer, Andoas, Peru, September 4-18

1. Amazon Promise Volunteer, Iquitos, Peru, February 4-26
2. Member, Ann Arbor Rotary Club
3. Amazon Promise Volunteer, Iquitos, Peru, February 10-March 2
4. Staff, University of Michigan Medical Student Free Clinic

2013 Amazon Promise Volunteer, Iquitos, Peru, February 8-March 3

**Consulting Positions**

2004 Steering Committee, 2005 Cerner Critical Care Conference

1. Steering Committee, 2006 Cerner Critical Care Conference

2006-2008 Kimberly Clark Corporation

1. Michigan Hospitals Association

2010 Ocera Corporation

2011 Biocritica

**Visiting Professorships, Seminars, and Extramural Invited Presentations**

Extramural Invited Presentations:

 Local:

12/20/2001 University of Michigan Division of Pulmonary and Critical Care Medicine Lecture, “Beyond the ARDSnet: The Search for Meaningful Subgroups”

5/2/2002 University of Michigan Annual Update in Internal Medicine, Ann Arbor, Michigan, “Sepsis ’02”

3/20/2003 Michigan Society of Critical Care Medicine 1st Annual Fellows Workshop, Dearborn, Michigan, “Assessing ICU Outcomes”

5/2/2003 University of Michigan Annual Update in Internal Medicine, “Clinicopathologic Conference”

9/16/2003 16th Annual Update on Pulmonary and Critical Care Medicine, Ann Arbor, Michigan, “Mechanical Ventilation Techniques in ARDS”

10/5/2004 17th Annual Update on Pulmonary and Critical Care Medicine, Ann Arbor, Michigan, “Endotracheal Tube Management”

9/26/2006 19th Annual Update in Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI, “Use of Corticosteroids in Sepsis and ARDS”

9/26/2007 20th Annual Update in Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI, “Nutrition in the ICU”

10/1/2010 23rd Annual Update in Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI, “Critical Care Hepatology”

9/29-30/2011 24th Annual Update in Pulmonary and Critical Care Medicine, University of Michigan Health System, Ann Arbor, MI, “Indications for Therapeutic Hypothermia”

 Regional:

4/27/1990 Michigan Thoracic Society and American College of Chest Physicians Michigan Chapter 1990 Scientific Sessions, Novi, MI; "Respiratory Intensive Care”

10/6/1990 Bay Medical Education Critical Care Symposium, Bay City, MI; "Adult Respiratory Distress Syndrome”

4/11/1991 Alpena County Medical Society, Alpena, MI; "Adult Respiratory Distress Syndrome”

10/2/1993 American College of Physicians Michigan Chapter Annual Meeting, Traverse City, MI; "CPC: Pulmonary Hemorrhage in an ANCA Positive Patient”

5/21/1999 Michigan Thoracic Society Annual Meeting, Novi, MI; "Open-lung ventilation in ARDS”

9/13/2000 St. Vincent’s Hospital Annual Respiratory Therapy Conference, Indianapolis, IN; “Management of Asthma”

3/13/2001 Calhoun County Medical Society, Battle Creek, MI, “Asthma”

9/11/2001 Cleveland Clinic Foundation, Cleveland, Ohio, “Idiopathic Interstitial Pneumonia”

3/19/2002 The Toledo Hospital Anesthesia Care Conference, Toledo, Ohio, “Management of Sepsis”

8/14/2002 Wayne State University Internal Medicine Grand Rounds, Detroit, Michigan, “Idiopathic Interstitial Pneumonia”

9/30/2002 University of Cincinnati Division of Pulmonary and Critical Care Medicine Conference, Cincinnati, Ohio, “Beyond the ARDSnet: The Search for Meaningful Subgroups”

11/6/2002 Michigan State Medical Society Annual Meeting, Troy, Michigan, “Sepsis”

2/19/2003 Hickman Cancer Center, Bixby Medical Center, Adrian, Michigan, “Oncologic Sepsis”

3/24/2003 The Toledo Hospital Medical Staff Conference, Toledo, Ohio, “Assessing ICU Outcomes”

6/25/2003 Greater Detroit Area Health Council, Dearborn, Michigan, “Current and Emerging Treatment of Asthma”

9/23/2003 Texas Internist Society Annual Meeting, Birmingham, Michigan, “ARDS”

10/18/2003 17th Annual Pulmonary and Critical Care Symposium, Battle Creek, Michigan, “Emerging Pathogens in Critical Care Medicine”

11/3/2003 University of Cincinnati Division of Pulmonary and Critical Care Medicine Conference, Cincinnati, Ohio, “Management of Sepsis”

3/30/2004 St. Johns Hospital Grand Rounds, Detroit, Michigan, “Interstitial Lung Disease”

5/21/2004 Munson Hospital Grand Rounds, Traverse City, Michigan, “Management of Sepsis”

9/15/2004 Oakwood Annapolis Hospital Pulmonary Update, Romulus, Michigan, “Assessment of ICU Outcomes”

9/21/2004 Saginaw County Medical Society, Saginaw, Michigan, “Surviving Sepsis”

10/19/2004 Keystone ICU Meeting, Traverse City, Michigan, “Keystone CCMU”

11/4/2004 HealthTalk guest faculty, Dearborn, Michigan, “Take Control of Asthma: New Treatments and Strategies for Better Living”

11/6/2004 Michigan Surviving Sepsis Campaign, Brighton, Michigan, “Local Practices: Are They Based in Science?”

10/13/2005 Impact Panel, Dearborn, Michigan, “From Rhetoric to Results,” Keystone Center for Patient Safety, Michigan Hospitals Association

4/25/2006 Keystone ICU Meeting, Grand Rapids, Michigan, “Revisiting the VAP Bundle”

10/11/2006 Keystone ICU Meeting, Dearborn, Michigan, “Moving Forward: VAP, Sepsis and Care and Communication”

5/16/2007 Keystone ICU Meeting, Grand Rapids, MI, “Welcome and Opening Remarks,” and “VAP Bundle”

8/3/2007 25th Annual University of Michigan Department of Internal Medicine Update, Mackinaw, MI, “What’s New in the ICU”

8/3/2007 25th Annual University of Michigan Department of Internal Medicine Update, Mackinaw, MI, “COPD Update”

8/3/2007 25th Annual University of Michigan Department of Internal Medicine Update, Mackinaw, MI, “Community Acquired Pneumonia”

9/19/2007 Keystone ICU Meeting, Dearborn, MI, “Welcome and Opening Remarks,” and “VAP Update”

4/11/2008 Fourth Annual Update in Pulmonary and Critical Care Medicine, Saginaw, MI, “Acute Lung Injury: Current Concepts”

4/25/2008 Michigan Thoracic Society Annual Scientific Meeting, Lansing, MI, “Evaluation and Treatment of Sepsis”

10/6/2008 Keystone ICU Meeting, Lansing, MI, “Welcome and Opening Remarks.”

10/24/2008 Michigan State Medical Society Annual Scientific Meeting, Troy, MI, “Asthma in the ICU and Status Asthmaticus”

4/15/2009 Michigan Health and Safety Symposium, Dearborn, MI, Changing the World Through Safer Care: Keystone ICU Collaborative Workshop: “Welcome and Updates”

6/3/2009 IMPACT Leadership Meeting: Leadership for Results, Detroit , MI, “The Keystone Initiative: Engage, Educate, Execute, and Evaluate”

1/15/2010 Keystone ICU Meeting, Lansing, MI, “Opening Remarks,” “H1N1 Panel Discussion,” and “Closing Remarks”

10/22/2010 Michigan State Medical Society Annual Scientific Meeting, Troy, MI, “Severe Asthma”

1/25/2011 MHA Keystone ICU meeting, Dearborn, MI. Moderator.

3/23/2011 Ann Arbor Rotary, “Amazon Promise: Toward Sustainable Health in Peru,” Ann Arbor, MI

7/6/2011 Ann Arbor Lions Club, “Amazon Promise: Toward Sustainable Health in Peru,” Ann Arbor, MI

1/4/2012 St. Mary’s Grand Rounds, “Medical Ethics in the ICU,” Livonia, MI

1/30/2013 MHA Keystone ICU Meeting, Grand Rapids, MI, “Data Update”

 National:

3/20/1997 American College of Physicians Annual Meeting, Philadelphia, PA; "Update on Mechanical Ventilation"

11/10/1997 American College of Physicians Internal Medicine Update Course, Scottsdale, AZ; "Management of Sepsis”

10/23/2000 American College of Chest Physicians Annual Meeting, San Francisco, CA; Plenary Presentation, “What’s New in Mechanical Ventilation”

11/20/2001 National Initiative in Sepsis Education, Detroit, Michigan, “Severe Sepsis: Advances in the Management of the Critically Ill Patient with Sepsis and Acute Organ Dysfunction”

12/6/2001 National Initiative in Sepsis Education, Austin, Texas, “Severe Sepsis: Advances in the Management of the Critically Ill Patient with Sepsis and Acute Organ Dysfunction”

4/27/2002 National Initiative in Sepsis Education, Boston, Massachusetts, “Severe Sepsis: Advances in the Management of the Critically Ill Patient with Sepsis and Acute Organ Dysfunction”

3/11/2004 University of Minnesota Regions Hospital, St. Paul, Minnesota, “ARDS: Net Update, Subgroups and SCCOR”

3/11/04 Center for Excellence in Critical Care, University of Minnesota, Minneapolis, Minnesota, “Demanding Medical Excellence: Improving Critical Care”

1/15/05 Cerner APACHE – Project Impact First Annual Critical Care Forum, Phoenix, Arizona, “Keystone ICU”

3/10/05 University of Wisconsin Division of Pulmonary and Critical Care Medicine lecture, Madison, Wisconsin,“Keystone CCMU”

4/29/05 Kansas City Southwest Clinical Society Annual Critical Care Meeting, Kansas City, Missouri, “Asthma and Acute Respiratory Failure”

10/1/2005 University of Cincinnati Pulmonary and Critical Care Update, Cincinnati, Ohio, “Controversies in Asthma”

9/16/2006 Second Annual University of Cincinnati Pulmonary Update, “Management of Sepsis”

9/7/2007 Center for Excellence in Critical Care Update in Critical Care 2007, Minneapolis, MN, “How Statewide or National Initiatives Help Move Quality Forward: Michigan’s Keystone ICU Project

10/22/2007 American College of Chest Physician Annual Meeting, Chicago, IL,“Teams, Tools, and Tips for Implementing Quality Improvement and Performance Measures: Michigan’s Keystone ICU Project”

6/19/2008 2008 Wisconsin Rural Health Conference, Elkhart Lake, WI, “The National Movement Toward Evidence-Based Practice”

10/22/2008 American College of Chest Physicians Annual Meeting, Philadelphia, PA, “Which Evidence-Based Practices Make a Difference in Critical Care?”

10/22/2008 American College of Chest Physicians Annual Meeting, Philadelphia, PA, “Translating ICU Infection Control Evidence into Practice: Prevention of Infections”

4/1/2009 House of Representatives Appropriations Subcommittee on Labor, Health and Human Services, Education and Related Agencies, Washington, D.C., panel on “Healthcare Associated Infections” on behalf of the American Hospitals Association

9/10/2009 Center for Excellence in Critical Care Update in Critical Care 2009, Minneapolis, MN, “Keystone ICU”

1/11/2009 Society of Critical Care Medicine Annual Congress, Miami, Florida, “How to Become a Fellow of the American College of Critical Care”

1/12/2010 Society of Critical Care Medicine Annual Congress, Miami, Florida, “The Clinical and Economic Consequences of Ventilator-Associated Pneumonia”

3/3/2010 On the CUSP: Stop BSI North Carolina Collaborative, Raleigh, NC, “A Keystone ICU Testimonial”

10/13/2010 American Lung Association 2010 Connecticut Annual Meeting and Scientific Session, Hartford, CT. “ARDS in the Era of H1N1”

11/2/2010 American College of Chest Physicians Annual Meeting, Vancouver, BC, Canada. Poster Moderator: “Non-Pulmonary Critical Care”

11/3/2010 American College of Chest Physicians Annual Meeting, Vancouver, BC, Canada. Moderator: “It Takes a Checklist: Improving ICU Quality, the Big 10 and Beyond”

11/3/2010 American College of Chest Physicians Annual Meeting, Vancouver, BC, Canada. “Check Please: Is the Whole Greater than the Sum of Its’ Parts?”

1/16/2011 Society of Critical Care Medicine Congress, San Diego, CA, “How to Become a Fellow of the American College of Critical Care Medicine”

1/18/2011 Society of Critical Care Medicine Congress, San Diego, CA, Moderator, “Year in Review: Internal Medicine”

1/19/2011 Society of Critical Care Medicine Congress, San Diego, CA, “The Barriers to Daily Awakening”

1/19/2011 Society of Critical Care Medicine Congress, San Diego, CA, “Will we be Rationing Extracorporeal Membrane Oxygenation in the Next Influenza Pandemic?”

3/5/2011 American Thoracic Society State of the Art Course in Pulmonary and Critical Care Medicine, San Diego, CA, “General Management of the Mechanically Ventilated Patient”

3/24/2011 Standard Register Healthcare Patient Safety Summit – Quest 2011, Panel Member on Quality Improvement Collaboratives in Healthcare

5/14/2011 American Thoracic Society International Conference, Denver, CO, “Who and When to Cool,” Postgraduate course: Therapeutic hypothermia post cardiac arrest: A review of the physiology, evidence, and a practical approach to implementation

5/17/2011 American Thoracic Society International Conference, Denver, CO, “Quality Performance Metrics in Your Practice,” Clinical year in review

10/23/2011 American College of Chest Physicians Annual Meeting, Honolulu, Hawaii, “Ha’awina in Nonpulmonary Critical Care,” Session Chair

10/23/2011 American College of Chest Physicians Annual Meeting, Honolulu, Hawaii, “Hepatic Critical Care”

10/25/2011 American College of Chest Physicians Annual Meeting, Honolulu, Hawaii, “Never Say Never: Ventilator-Associated Pneumonia as a Quality Indicator,” Session Chair

10/25/2011 American College of Chest Physicians Annual Meeting, Honolulu, Hawaii, “VAP as a Hospital-Acquired Condition: Wherefore and Why . . . NOT!”

2/5/2012 Society of Critical Care Medicine Congress, Houston, TX, “How to Become a Fellow of the American College of Critical Care Medicine”

2/6/2012 Society of Critical Care Medicine Congress, Houston, TX, Moderator, “Less than Zero: Pursuing Perfection in the ICU”

2/6/2102 Society of Critical Care Medicine Congress, Houston, TX, “Taking Central Line-Associated Bloodstream Infections to Zero and Staying there: Michigan’s Keystone ICU project”

2/6/2012 Society of Critical Care Medicine Congress, Houston, TX, Moderator, “Outcomes Associated with Early Physical Activity in Patients with Respiratory Failure”

2/7/2012 Society of Critical Care Medicine Congress, Houston, TX, Moderator, “Imitators of Acute Respiratory Distress Syndrome”

2/7/2012 Society of Critical Care Medicine Congress, Houston, TX, “Acute Interstitial Pneumonia is Idiopathic ARDS”

5/20/2012 American Thoracic Society International Conference, Meet the Professor, “How to achieve zero CLBSI rates in your ICU,” San Francisco, CA

5/21/2012 American Thoracic Society International Conference, Session Chair Poster Discussion Session, “Devices and monitoring in the ICU,” San Francisco, CA

5/22/2012 American Thoracic Society International Conference, Session Facilitator, “Pulmonary and non-pulmonary critical care: Great cases,” San Francisco, CA

10/21/2012 American College of Chest Physicians Annual Meeting, Atlanta, GA, Moderator “Critical Care Year in Review”

10/21/2012 American College of Chest Physicians Annual Meeting, Atlanta, GA, “What’s New in Mechanical Ventilation”

10/21/2012 American College of Chest Physicians Annual Meeting, Atlanta, GA, Moderator “Update in Non-pulmonary Critical Care”

10/21/2012 American College of Chest Physicians Annual Meeting, Atlanta, GA, Moderator “Care of the patient undergoing mechanical ventilation”

1/19/2013 Society of Critical Care Medicine Congress, San Juan, Puerto Rico, Critical Care in Unusual Settings; The Immunocompromised Patient: Transplant

1/20/2013 Society of Critical Care Medicine Congress, San Juan, Puerto Rico, “Influenza Update.”

1/22/2013 Society of Critical Care Medicine Congress, San Juan, Puerto Rico, “Quality Measures and Ventilator Associated Conditions.”

1/23/2013 Society of Critical Care Medicine Congress, San Juan, Puerto Rico, “The Role of Corticosteroids in ARDS.”

 International:

4/27/2001 Princess Margaret Hospital 7th Annual Anesthesia / ICU Conference, Nassau, Bahamas, BWI, “Sedation in the Medical ICU”

9/14/2005 Princess Margaret Hospital, Hong Kong, China, “Management of Sepsis”

9/15/2005 Adventist Healthcare CME Lecture, Hong Kong, China, “Lower Respiratory Tract Infections”

9/17/2005 First Annual Combined Hong Kong Society of Critical Care Medicine / Hong Kong Critical Care Nurses Association Conference, Hong Kong, China, Satellite Luncheon Symposium “Ventilator Associated Pneumonia”

11/9/2005 Hallim University Pyeongchon Hospital, Anyang, Korea, “Ventilator Associated Pneumonia”

11/10/2005 Aju University Hospital, Suwan, Korea, “Ventilator Associated Pneumonia”

11/11/2005 Korean Academy of Tuberculosis and Respiratory Diseases 101st Meeting, Seoul, Korea, “Ventilator Associated Pneumonia”

5/2/2006 Queen Elizabeth Hospital Pulmonary Conference, Hong Kong, China, “Pseudomonas Infections and Antibiotic Resistance”

5/3/2006 Princess Margaret Hospital Grand Rounds, Hong Kong, China, “Diagnosis and Treatment of Hospital Acquired Pneumonia”

5/4/2006 Hong Kong Medical Association, Hong Kong, China, “Management of Sepsis”

5/18/2009 International Forum on Quality and Safety in Health Care, Berlin, Germany, “Keystone ICU”

10/23/2009 Belize Medical and Dental Association 28th Annual Congress, Belize City, Belize, “Patient Safety”

10/23/2009 Belize Medical and Dental Association 28th Annual Congress, Belize City, Belize, “Asthma”

10/23/2009 Belize Medical and Dental Association 28th Annual Congress, Belize City, Belize, “Pulmonary Embolism”

10/13/2011 XIV Congresso Colombiano de Neumologia y Cirgia de Torax, Bogota, Columbia, “Management of Sepsis”

10/13/2011 XIV Congresso Colombiano de Neumologia y Cirgia de Torax, Bogota, Columbia, “Late Conseqences of ARDS and Sepsis”

10/14/2011 XIV Congresso Colombiano de Neumologia y Cirugia de Torax, Bogota, Columbia, “Acute Respiratory Distress Syndrome”

10/14/2011 XIV Congresso Colombiano de Neumologia y Cirgia de Torax, Bogota, Columbia, “Care of the Ventilated Patient”

10/14/2011 XIV Congresso Colombiano de Neumologia y Cirugia de Torax, Bogota, Columbia, “Protocols and Checklists in the ICU”

12/12/2011 Asociacion Mexicana de Medicina Critica y Terapia Intensiva annual meeting, Mexico DF, Mexico, “Ventilatory Strategies in ARDS.”

12/13/2011 Asociacion Mexicana de Medicina Critica y Terapia Intensiva annual meeting, Mexico DF, Mexico, “Rationing Medical Care in the Pandemic Era.”

10/25/2012 Asociacion Mexicana de Medicina Critica y Terapia Intensiva annual meeting, Leon, Mexico, “Optimization of support in the septic patient”

10/26/2012 Asociacion Mexicana de Medicina Critica y Terapia Intensiva annual meeting, Mexico DF, Mexico, “Lung recruitment maneuvers”

**Bibliography**

Peer-Reviewed Journals and Publications:

1. Ruben L, Lageson J, **Hyzy** **R**, Hooper AB. Growth cycle dependent overproduction and accumulation of protoporphyrin IX in Tetrahymena: Effect of heavy metals. J Protozool 1982; 29:233-238. PMID: 6808123.

2. Morosco WA, Gikas P, Azziz-Baumgartner R, **Hyzy** **R**, Elderidge C, Stross J. Ibuprofen associated renal dysfunction: Pathophysiological mechanisms of acute renal failure, tubular necrosis, hyperkalemia and proteinuria. Arch Int Med 1987; 147:2107-2116. PMID: 3689062.

3. Peters-Golden M, McNish RW, **Hyzy R**, Shelly C, Toews GB. Alterations in the pattern of arachidonate metabolism accompany rat macrophage differentiation in the lung. J Immunol 1990; 144:263-270. PMID: 2104888.

1. Chauncey JB, Lynch JP, **Hyzy RC** and Toews GB. Invasive Technique in the diagnosis of bacterial pneumonia in the intensive care unit. Semin Resp Inf 1990; 5:215-225. PMID: 2255805.

1. Ivey M, Eichenhorn MS. Glasberg MR and **Hyzy R**. Hypercapnic respiratory failure due to L-tryptophan induced eosinophilic myositis. Chest 1991; 99:756-757. PMID: 1995239.

6. Cammarata SK, Brush RE, **Hyzy RC**. Chylothorax after childbirth. Chest

 1991; 99:1539-1540. PMID: 2036852.

7. Cammarata SK, Dircks J, Grambau G, Abraham T, Schoell J, **Hyzy R**. Elevated right hemidiaphragm with yellow sputum production. Chest 1991; 99(6):1463-1465. PMID: 2036832.

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