CURRICULUM VITAE

**Sadis Matalon, Ph.D., Dr.Sc. (Hon.)**

**Updated 12/13/2013**

**PERSONAL**

Address: Department of Anesthesiology

University of Alabama at Birmingham

901 19th St. South, BMR II 224

Birmingham, Alabama 35294

Tel. (205) 934-4231

Email: [sadis@uab.edu](mailto:sadis@uab.edu)

Birthplace: Athens, Greece

Citizenship: USA (naturalized)

**EDUCATION**

B.A. Macalester College, St. Paul, Minnesota

*Cum Laude*, with special departmental honors in physics, 1970 Major: Physics

M.S. University of Minnesota, Minneapolis, Minnesota, 1973

Major: Physics

Ph.D. University of Minnesota, Minneapolis, Minnesota, 1975

Major: Physiology

**Dissertation**: Water and Non-electrolyte Solute Transport across the Pulmo­nary Capillaries in New­born Rabbits, 1975

Dr.Sc. (Honorary) University of Thessaly, School of Medical Sciences, Greece (2010)

**ACADEMIC POSITIONS**

2013- Present Distinguished Professor of Anesthesiology, University of Alabama at Birmingham, Birmingham, AL

2009- Present Vice Chair for Research, Department of Anesthesiology, University of Alabama at Birmingham, Birmingham, AL

2008 – Present Director, Pulmonary Injury and Repair Center, School of Medicine, University of Alabama at Birmingham, Birmingham, AL

2007-2009 Director of Research, Division of Critical Care and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, AL

2003-2011 Professor of Microbiology, University of Alabama at Birmingham, Birmingham, AL

2003- 2004 Acting Vice President for Research, University of Alabama at

Birmingham, Birmingham, AL

2002- 2003 Acting Associate Provost for Research and Scholarship,

University of Alabama at Birmingham, Birmingham, AL

2002- 2002 Assistant Provost for Research, University of Alabama at Birmingham, Birmingham, AL

2002- 2003 Senior Associate Dean of the Graduate School, University of Alabama at Birmingham, Birmingham, AL

2001- 2002 Associate Dean for Postdoctoral Education, University of Alabama at Birmingham, Birmingham, AL

2000- Present Professor of Environmental Health Sciences, School of Public Health, University of Alabama at Birmingham, Birmingham, AL

1999 - Present Alice McNeal Endowed Chair, Department of Anesthesiology, University of Alabama at Birmingham, Birmingham, AL

1999 -2003 Professor of Genetics, University of Alabama at Birmingham, Birmingham, AL

1987 - Present Professor of Anesthesiology, University of Alabama at Birmingham, Birmingham, AL

1989 -2011 Professor of Pediatrics, University of Ala­bama at Birmingham, Birmingham, AL

1987 - Present Professor of Physiology and Biophysics, University of Alabama at Birmingham, Birmingham, AL (Currently Cell, Developmental and Integrative Biology)

1984 - 1987 Research Associate Professor of Pathology, State University of New York at Buffalo, Buffalo, NY

1982 - 1987 Associate Professor of Physiology with Tenure, State University of New York at Buffalo, Buffalo, NY

1977 - 1982 Assistant Professor of Physiology, State University of New York at Buffalo, Buffalo, NY

1976 - 1977 Research Assistant Professor of Physiology, State University of New York at Buffalo, Buffalo, NY

1975 - 1976 Associate (Instructor), Department of Pediatrics and Physiology, Northwestern University and Children's Memorial Hospital, Chicago, IL

**PROFESSIONAL ACTIVITIES**

1997 – 2004 President, International Foundation for Biomedical Research, Inc, Birmingham, AL

## PROFESSIONAL HONORS

2012 - present Editor-In-Chief, *American Journal of Physiology - Lung Cellular and*

*Molecular Physiology*

2010 Honorary Doctor of Science, University of Thessaly, Larisa, Greece

2007 - 2011 Deputy Editor, *American Journal of Respiratory Cell and Molecular Biology*

2004 Selected as the “Best Basic Science Professor” by the 2004 School of Medicine Class; recipient of the Caduceus award

2003 Who’s Who in *ATS News*

2002 Recognition Award for Scientific Accomplishment, American Thoracic Society

1998 Keynote speaker, 24th Annual Pan-Hellenic Medical Symposium, Athens, Greece

1997, 1998, 2001 Recipient, Argus Society Award for Instructional Excellence (Best Instructor, First Year Medical Class), University of Alabama at Birmingham

1997 Recipient, Joint Health Sciences Presidential Teaching Award for 1997, University of Alabama at Birmingham

1997 - 2007 MERIT Award, National Institutes of Health

1994, 1996 Nominated for the “Best Basic Science Teacher Award,” School

1999, 2000 of Medicine, University of Alabama at Birmingham. Received award for Excellence in Teaching (runner up to Best Instructor)

1987 - 1992 Career Investigator Award, American Lung Association

1966 - 1970 Fulbright Scholar, Macalester College

**MEMBERSHIP IN PROFESSIONAL SOCIETIES**

American Thoracic Society

- Member, Program and Budget Committee (2007- 2008)

- Member, Strategic Planning Committee (2006 -2007)

- Member, ALA Research Grant Review Committee (2006 -2008)

- Member, Long Range Planning Committee (2004-2006)

- Member, Awards Committee (2002 – 2003)

Assembly on Respiratory Cell and Molecular Biology

* Member, Program Committee (2006-2007)
* Chairman Elect and Chairman of the Assembly (2001-2004)

- Chairman Elect and Chairman, Program Committee (1998-2000)

- Chairman, Long Range Planning Committee (1993 - 1995)

The American Physiological Society

- Member, Awards Committee (1999-2001)

- Chairman, Program Committee, Respiration Section, (1998-2001)

- Chairman, Respiration Dinner (1997)

**MEMBERSHIP ON UAB COMMITTEES**

Member, Distinguished Professor Review Committee by invitation from the Provost, December 2013

Chair, Distinguished Professor Review Committee by invitation from the Provost, September 2013 Member, Infectious Diseases / Global Health / Vaccines (ID-GH-V) Steering Committee, School of Medicine, 2011

Member, Host Defense Group, Immunology, Allergy and Transplantation Steering Committee, School of Medicine, 2011

Member, Distinguished Faculty Lecturer Committee (2007-2009)

Member, Joint Health Sciences Faculty Status Committee (1993-1995); Co-Chairman, (1996)

Member, Tenure Definition Committee (1994-1996)

Member, Molecular Medicine Strategic Planning Group (1997)

Member, Department of Human Genetics Chair Search Committee (1998)

Member, School of Medicine Research Advisory Committee (1998-2002)

Member, Department of Pulmonary, Allergy, & Critical Care Medicine Division Director Search Committee (2006- Present)

Department of Anesthesiology

Member, Promotions Committee (1994-2003; 2007-2009)

Member, Education Committee (1996-2003)

Co-Chair, Critical Care Faculty Search Committee (2006)

**INVITED LECTURES** (1991-2013)

Co-Chair and co-organizer (with Dr. Lester Kobzik), Symposium on “Programming the Lung: Epigenetics Mechanisms”, Experimental Biology, Boston, MA, April 2013

Invited Speaker, “How to Get Your Work Published in APS Journals and Avoid Minefields Along the Way”, Experimental Biology, Boston, MA, April 2013

Invited Speaker, Lung Injury Center, Section of Pulmonary and Critical Care, Department of Medicine, The University of Chicago, March 2013

Invited Speaker, Basic & Translational Science Symporium, University of Alabama at Birmingham, Pulmonary Allergy and Critical Care Medicine, March 2013

Invited Speaker, 10th European Respiratory Society Lung Science Conference, Estoril, Portugal, March 30, 2012.

Co-Chairman, Featured Topic on “Lung Ion Channels and Fluid Homeostasis”, Experimental Biology, 2012

Member of organizing committee and invited participant, NIEHS “Workshop to Examine the Interactions between Environmental Exposures and Infectious Agents in the Etiology of Human Disease”, Research Triangle Park, NC, Sept. 8, 2011.

Invited Speaker, 5th Annual CounterACT Network Research Symposium, “Novel Treatments of Chlorine Induced Injury to the Cardio-Respiratory Systems”, Washington, DC, June 2011.

Visiting Scientist, 2011 NIEHS Strategic Planning Stakeholder Community Workshop, Research Triangle Park, NC, June 28 – 30, 2011.

Distinguished lecturer, Division of Biological Sciences, Harvard School of Public Health, “Leaders in Biology” Distinguished Lecture Series, Boston, MA, May 2011

Invited speaker, Emory University Department of Physiology, “Influenza Virus M2 Protein Damages Lung Epithelial Na+ Channels via Generation of Reactive Intermediates,” Atlanta, GA, April 2011

Invited speaker, University of Alabama at Birmingham, Pulmonary Grand Rounds, Birmingham, AL, March 2011

Invited speaker, University of Alabama at Birmingham, Seminars of the Molecular and Cellular Pathology Graduate Program, Advances in Molecular and Cellular Pathology, Birmingham, AL, March 2011

Invited speaker, Angion Biomedical Corp., Long Island, NY, February 2011

Invited speaker, Lundberg-Kienlen Lecture, Center for Veterinary Health Sciences, Oklahoma State University, Stillwater, OK, November 4, 2010

Invited speaker, 2010 North American Cystic Fibrosis Conference, Baltimore, MD, October 21, 2010

Invited speaker, FAER Academy of Anesthesiology Mentors Workshop: Enhancing Departmental Research Through Mentorship, American Society of Anesthesiologists Annual Meeting, San Diego, CA, October 16-20, 2010

Co-Director, Workshop on “Environmental Lung Disease: From Bench to Bedside 2010,” Limmasol, Cyprus, October 11 – 13, 2010 (Sponsored by Harvard-Cyprus Initiative for Environment and Public Health)

Visiting Professor and invited speaker, Department of Anesthesiology, Columbia University, New York, NY, September 29, 2010

Invited speaker, Department of Molecular Cell Physiology, Center for Medical Education and Research, Kyoto Prefectural University of Medicine, Kyoto, Japan, June 28, 2010

Special invited speaker, Annual Meeting of Integrated Pulmonary Circulation II, Tokyo, Japan, June 26, 2010

Invited speaker, 4th Annual CounterACT Network Research Symposium, San Francisco, CA, June 21, 2010

Invited speaker, National Institute of Environmental Health Sciences, Durham, NC, May 2010

Invited speaker, The Congress of the Greek Physiological Society, University of Thessaly, Larisa, Greece, May 7, 2010

Invited speaker, Cross Sectional Symposium on Reactive Species and Ion Channels, 2010 Experimental Biology Meeting, Anaheim, CA, April 28, 2010.

Invited speaker, Macalester College, Biology Department Seminar Series, St. Paul, MN, November 9, 2009.

Invited speaker, 4th International Conference on Oxidative/Nitrosative Stress and Disease, New York, NY, October 28-20, 2009.

Invited speaker, European Respiratory Society Congress, Vienna, Austria, September 12-16, 2009

Invited speaker, National Institutes of Health (NIH) Expert Panel Workshop on Toxic Industrial Chemicals (Pesticides and Pulmonary Edemagenic Chemicals), Bethesda, MD, July 22-23, 2009

Invited speaker, International Symposium on “Epithelial Ion Transport,” Kyoto, Japan, July 2009

Co-Director, Workshop on “Environmental Lung Disease: From Bench to Bedside 2009,” Nicosia, Cyprus, June 8-10, 2009 (Sponsored by Harvard-Cyprus Initiative for Environment and Public Health)

Invited speaker, 3rd Annual CounterACT Network Research Symposium, Washington, DC, April 14-16, 2009

Invited speaker and Chair, Pre-Conference Symposium “Countermeasures Against Injury from Inhaled Chlorine,” 3rd Annual CounterACT Research Symposium, Washington, DC, April 13, 2009

Invited participant, Sepracor Scientific Research Forum, New Orleans, LA, September 18 – 21, 2008

Invited participant and speaker, Annual Retreat of the Molecular Biology and Medicine of the Lung Graduate Program, University of Giessen Lung Center, Giessen, Germany, July 25-31, 2008

Visiting Professor, Uniformed Services University, Bethesda, MD, June 23 – 24, 2008

Invited speaker, 6th International Life Science Meeting, IMC University of Applied Sciences, Krems, Austria, May 2008

Invited speaker, ATS 2008, Mini Symposium “Epithelial Cell Driven Control of Lung Inflammation,” Toronto, Canada, May 2008

Visiting Professor and invited speaker, The University of Texas Health Science Center at Tyler, Tyler TX, April 2008

Invited speaker, 2nd Annual CounterACT Network Research Symposium, Arlington, VA, April 2008

Visiting Professor and invited speaker, University of California Davis, Davis, CA, April 2008

Invited speaker, 6th European Respiratory Society Lung Science Conference on “Resolution of Alveolar Edema Following Viral Injury,” Estoril, Portugal, March 2008

Invited speaker, European Respiratory Society Annual Congress 2007, Stockholm, Sweden, September 2007

Invited speaker, 1st Annual CounterACT Network Research Symposium, Arlington, VA, April 2007

Invited speaker, International Hypoxia Symposium, Lake Louise, Alberta, Canada, February 2007

Invited speaker, Floating Hospital for Children at Tufts-New England Medical Center, combined Pulmonary Medicine, Neonatology Grand Round, Boston, MA, 2007

Invited speaker, Physiological Genomics and Proteomics of Lung Disease, 2006 American Physiological Society Conference, Ft. Lauderdale, FL, November 2006

Invited speaker, Inspire Pharmaceuticals, Durham, NC, May 2006

Invited speaker, International Symposium on Respiratory Diseases (ISRD), Shanghai, China, November 2006

Invited speaker, 26th International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 2006

Invited speaker, Medical College of Wisconsin, Milwaukee, WI, February 2006

Invited speaker, Medical College of Georgia, Augusta, GA, January 2006

Keynote speaker, International Scientific Conference on “New Frontiers in Biomedicine and Biotechnology,” Danube University and IMC University of Applied Sciences, Krems, Austria, November 2005

Invited speaker, 10th PanHellenic Congress on Intensive Care, Athens, Greece, October 2005

Invited speaker, European Respiratory Society, Copenhagen, Denmark, September 2005

Invited speaker, 15th Annual Congress of the European Respiratory Society, Copenhagen, Denmark, September 2005

Invited speaker, National Institute of Allergy & Infectious Diseases, Washington D.C., August 2005

Visiting Professor and invited speaker, Pulmonary and Critical Care Division, Johns Hopkins University, Baltimore, MD, May 2005

Invited speaker and symposium Chair, Annual Meeting of the American Thoracic Society, San Diego, CA, May 2005

Invited speaker, Hellenic Intensive Care Society, Athens, Greece, April 2005

Invited speaker, Hellenic Thoracic Society, Ioannina, Greece, April 2005

Visiting Professor and invited speaker, Pulmonary and Critical Care Division, Columbia /Presbyterian Medical Center, New York, NY, March 2005

Invited speaker, Third European Respiratory Society Conference, Taormina, Italy, March 2005

Invited speaker, 13th Panhellenic Congress on Lung Diseases, Patras, Greece, December 2004

Invited speaker, “Pathogen-induced activation of human alveolar macrophages from lung transplant recipients,” European Respiratory Society Congress, Glasgow, Scotland, September 2004

Visiting Professor and speaker, Northwestern University School of Medicine, Division of Pulmonary & Critical Care Medicine, Chicago, IL, September 2004

Invited speaker, Annual Meeting of the Society of Neonatology and Pediatric Critical Care, Ulm, Germany, June 2004

Invited presenter, NIH Lung Transplantation Workshop, Bethesda, MD, June 2004

Invited presenter, NHLBI COPD Workshop, Bethesda, MD, May 2004

Invited speaker, ATS 2004 Conference, “Redox Regulation of Lung Ion Channels by Reactive Oxygen-Nitrogen Species,” May 2004

Invited speaker, Massachusetts General Hospital, Harvard Medical School, Boston, MA, April 2004

Invited speaker, Hellenic Thoracic Society, Athens, Greece, December, 2003

Invited speaker; European Respiratory Society Symposium “Redox signal transduction in the lung; basic and clinical implications”; “Redox regulation of ion channels in the lung”, Vienna, Austria, October 2003

Invited speaker and symposium organizer, Cystic Fibrosis Foundation, “Role of Redox Regulation of Microbicidal Activity”; “Regulation of CFTR Structure and Function by Reactive Oxygen Nitrogen Intermediates,” Anaheim, CA, October, 2003

Invited speaker, European Respiratory Society, Paris, France, June 2003

Invited speaker and organizer, “Interactions of pathogens with respiratory epithelial cells: Mechanisms and physiological sequallae,” “Inhibition of sodium transport across airway epithelial cells by respiratory syncytial virus: mechanisms and pathophysiological implications,” American Thoracic Society, Seattle, WA, May 2003

Invited speaker and organizer, “Regulation of Ion Channel Structure and Function by Reactive Oxygen Nitrogen Intermediates,” ”Modulation of CFTR Structure and Function by Reactive Oxygen-Nitrogen Intermediates,” Experimental Biology, San Diego, CA, April 2003

Invited speaker and External Advisor for Program Project Grant, University of South  
Alabama, Department of Pharmacology and Center for Lung Biology, Mobile, AL, February 2003

Visiting Professor and Outside Ph.D. Examiner, University of Vanderbilt, Nashville, TN, February 2003

Invited participant, SPARK II Conference, National Institutes of Health, NHLBI, Bethesda, MD, January 2003

Visiting Professor, North Shore Hospital, Long Island, NY, October 2002

Visiting Professor, University of Louisville, Kossair Children’s Hospital, Louisville, KY, August 2002

Invited speaker and member, Organizing Committee, Third International Meeting on Reactive Oxygen/Nitrogen Radicals and Cellular Injury, Morgantown, WV, June 2002

Visiting Professor, Northeastern Ohio University, School of Medicine, Department of Physiology, Rootstown, OH, May 2002

Invited speaker, Postdoc Network Meeting, Washington, DC, April 2002

Invited speaker, Council of Graduate Schools Annual Meeting, San Diego, CA, December 2001

Invited speaker, Department of Medicine, Division of Pulmonary Medicine, University of Iowa, Iowa City, IA, November 2001

Invited speaker and section chair, International Meeting of Diseases in the Lung, Santa Fe, New Mexico, October 2001

Visiting Professor, Departments of Pediatrics and Medicine, University of Minnesota, July 2001

Plenary Lecturer, NATO Advanced Study Institute on Exhaled Nitric Oxide, Crete, Greece, June 2001

Featured Speaker, Experimental Biology, Session on Ion Transport, Orlando, Florida, April, 2001

Featured speaker, Joint Meeting of the Departments of Medicine, Universities of Washington, Oregon Medical Center and University of Vancouver, Seattle, WA, February 2001

Visiting Professor, University of Paris, Faculte Xavier Bichat, Unite Inserm, Paris, France, December, 2000

Visiting professor, School of Public Health, Harvard University, Boston, MA, October 2000

Visiting professor, Winthrop University Hospital, Cardiopulmonary Research Institute, Mineola, NY, October 2000

Invited speaker, 6th World Hellenic Biomedical Congress, Athens, Greece, October 2000

Visiting Professor, (Chairman of the External Advisory Committee on Program Project on Alcohol and ARDS), Department of Medicine, Emory University, Atlanta, GA, September 2000

Visiting professor, School of Medicine, Dartmouth University, Hanover, NH, September 2000

Invited speaker, FASEB Conference, Surfactant: Cellular and Molecular Biology, Saxton’s River, VT, July 2000

Invited speaker, International Conference of the American Thoracic Society, “Gaseous molecules in the Lung,” Toronto, Canada, May 2000

Invited speaker, General Hospital Attikes, National Institute of Health, Greece, April 2000

Invited speaker, Workshop on HAPA: International Capanna Regina Margherita Study 1999, Klein Scheidegg, Switzerland, March 2000

Invited speaker and member of the Scientific Advisory Committee, First World Conference on Acute Lung Injury, Tenerife, Canary Islands, Spain, February 2000

Visiting Professor, Department of Physiology and Center for Cell Signaling, Emory University, Atlanta, GA, November 1999

Distinguished Environmental Scientist, NHEERL and North Carolina State University, Raleigh, NC, November 1999

Visiting Professor, Department of Medicine, Division of Pulmonary Medicine and Critical Care, Northwestern University, Chicago, IL, October 1999

Invited speaker, Conference on Pathology of the Surfactant System of the Mature Lung, San Diego, CA, October 1999

Invited speaker, NHLBI Workshop on Alveolar Epithelial Transport: Basic Science to Clinical Medicine, Washington, DC, August 1999

Invited speaker, Macalester College Department of Physics, St. Paul, MN, April 1999

Invited speaker, University of Minnesota Departments of Pediatrics and Medicine, Minneapolis, MN, April 1999

Invited speaker, American Thoracic Society Postgraduate Course on Pathogenesis of Lung Injury at the Molecular Level, San Diego, CA, April 1999

Invited speaker, Experimental Biology Minisymposium on Mechanisms of Lung Epithelial Injury, Washington, DC, April 1999

Invited speaker, Eli Lilly Research Laboratories, Indianapolis, IN, March 1999

Invited speaker, Department of Pathology, University of Alabama at Birmingham, Birmingham, AL, February 1999

Invited speaker, Harvard School of Public Health, Boston, MA, November 1998

Invited speaker, Lovelace Respiratory Research Institute, Albuquerque, NM, June 1998

Invited speaker, Respiration Research Retreat, University of Pennsylvania Medical Center, Institute for Environmental Medicine, Philadelphia, PA, May 1998

Invited speaker, Experimental Biology, San Francisco, CA, April 1998

Invited speaker, American Thoracic Society International, Chicago, IL, April 1998

Invited speaker, 2nd Mediterranean Congress on Thoracic Diseases, Athens, Greece, March 1998

Invited speaker, Vascular Biology Center Seminar Series, Medical College of Georgia, Augusta, GA, January 1998

Invited speaker, American Heart Association 70th Scientific Sessions, Orlando, FL, November 1997

Invited speaker, Vanderbilt University, Nashville, TN, November 1997

Invited speaker, American Physiological Conference on "The Physiology and Functional Diversity of Amiloride-sensitive Na+Channels: A new Superfamily" Park City, UT, October 1997

Invited speaker and member, Organizing Committee, Second International Meeting on Reactive Oxygen/Nitrogen Radicals and Cellular Injury, Durham, NC, September 1997

Invited speaker, Departments of Pathology and Physiology, University of Texas Health Science Center, San Antonio, TX, August 1997

Invited speaker, First National Symposium on "New Concepts on Damaging Effects of the Inhaled Cigarette Smoke,” Athens School of Medicine, Athens, Greece, January 1997

Invited lecturer, Advanced Respiratory Physiology Course, Athens School of Medicine, Athens, Greece December 1996

Invited speaker, Ninth International Colloquium on Lung Fibrosis, “Nitric Oxide and Gene Transfer" Oaxaca, Mexico, November 1996

Invited speaker, Naval Medical Research Institute, “Role of Reactive Oxygen and Nitrogen Species in Acute Respiratory Failure," Bethesda, MD, October 1996

Invited Plenary Lecturer, The Sixth International Meeting on the Toxicology of Natural and Man-Made Fibrous and Non-Fibrous Particles, September 1996

Invited speaker, NATO conference on Vascular Endothelium: Pharmacologic and Genetic Manipulations, “Modulation of Gene Transfer by Nitric Oxide," Crete, Greece, July 1996.

Featured speaker, American Thoracic Society, "Nitric Oxide and Airway Epithelium,” New Orleans, LA, May 1996

Visiting Professor, Center for Comparative Respiratory Disease, University of California Davis, Davis, CA, May 1996

Visiting Professor, Lawson Research Institute, "Nitrogen Oxide Mediated Injury to Pulmonary Surfactant,” London, Ontario, Canada, April 1996

Visiting Professor, School of Biomedical Engineering, Northwestern University, "Nitric Oxide Injury to Pulmonary Surfactant,” Evanston, IL, April 1996

Invited speaker, American Oil Chemists' Society-International Lecithin & Phospholipid Society Division, "Lipid Carriers for Gene Therapy,” Indianapolis, IN, April 1996

Visiting Professor, Pathology Grand Rounds at the University of Vermont, "Nitrotyrosine Formation in Lung Injury and Pulmonary Diseases,” Burlington, VT, March 1996

Invited speaker, Antimicrobial Therapy in Cystic Fibrosis Conference, "Antioxidant treatment in inflammatory diseases with emphasis on cystic fibrosis,” Valencia, Spain, November 1995

Visiting Professor, Distinguished Scientist Seminar Series, University of South Alabama, College of Medicine, "Oxidant regulation of alveolar ion channels,” Mobile, AL, October 1995

Visiting Professor, Michael Reese Hospital and Medical Center, "Mechanisms of Reactive Oxygen and Nitrogen Species Injury to Pulmonary Lipids and Apoproteins" Chicago, IL, June 1995

Visiting Professor, Pennsylvania State University, College of Medicine, Department of Cellular and Molecular Physiology, Hershey, PA, May 1995

Co-chair ATS Poster Discussion on "Alveolar epithelium and surfactant biology,” Atlanta, GA, April 1995

Invited speaker, American Thoracic Society, "Alveolar epithelial ion and fluid transport", April 1995

Invited speaker, American Thoracic Society, "Surfactant replacement therapy: where it stands and where we go from here,” April 1995

Invited speaker, Conference on Nasal and Pulmonary Drug Delivery, "Alveolar Epithelia Injury,” Munich, Germany, March 1995

Invited speaker, Symposium on "Pathology of the surfactant system of the mature lung,” San Diego, CA, March 1995

Visiting Pulmonary Scholar, "Chemical Institute of Toxicology,” Durham, NC, February 1995

Invited speaker, "5th International Inhalation Symposium,” Hanover, Germany, February 1995

State-of-the-art speaker, "8th International Colloquium on Pulmonary Fibrosis,” Dijon, France, October 1994

Featured speaker, American Thoracic Society, "Nitric Oxide in Acute Lung Injury" May 1994

Visiting professor, Winthrop University Hospital, Cardiopulmonary Research Institute, Mineola, NY April 1994

Invited speaker, FASEB, "Biology of Alveolar Epithelial Fluid and Solution Transport,” April 1994

Chairman, FASEB Minisymposium on Oxidant Lung Injury, April 1994

Invited speaker, 10th Annual Children's National Medical Center's ICMO Symposium, Keystone, CO, March 1994

Invited speaker, University of Utah, Department of Pediatrics, Salt Lake City, UT, March 1994

Invited speaker, University of California in San Diego, Department of Pediatrics, San Diego, CA, February 1994

Invited speaker, Seventh Annual North American Cystic Fibrosis Conference; Symposium on Neutrophil-mediated Oxidant Injury to the Lung, Dallas, TX, October 1993

Visiting professor, Department of Pulmonary and Critical Care Medicine, University of Minnesota, Department of Medicine, Division of Pulmonary Medicine, September 1993

Chair, American Lung Association/American Thoracic Society International Conference Minisymposium on Antioxidant Delivery Systems, San Francisco, CA, May 1993

**International Meetings Organized**

**Director**, NATO Advanced Study Institute – *Etiology and Treatment of Acute Lung Injury* (June 25-July 05, 2000); Sponsored by the Scientific Affairs Division of NATO and was attended by approximately 125 participants from NATO countries <http://www.natoards.uab.edu>

**Director**, NATO Advanced Study Institute- *Adult Respiratory Distress Syndrome: From Bench to Bedside* (June 15- June 25, 1997); Sponsored by the Scientific Affairs Division of NATO and was attended by approximately 100 participants from NATO countries <http://www.natoards.uab.edu/Old_web/index.html>

**Co-Director**, Workshop on Environmental Lung Disease**:** Environmental Chemical Threats and Lung Injury: Mechanisms and Countermeasures (October 11 – October 13, 2010); Amathus Beach Hotel, Limassol, Cyprus

<http://www.lunginjury.uab.edu/Seminars/CUT%20CII%20OCTOBER%20PROFESSIONAL%20EDUCATION%20PROGRAM.pdf>)

**Co-Director**, Workshop on Environmental Lung Disease: Bench to Bedside (May 2009); Cyprus International Institute for the Environment and Public Health & Harvard School of Public Health

<http://www.undp-act.org/data/articles/envir%20%20lung%20disease%20brochure.pdf>

**STUDY SECTIONS and REVIEW COMMITTEES**

***Permanent member***

American Lung Association, Grant Review Committee (2004-2008)

Member of Scientific Advisors, The Francis Family Foundation (2000-2004)

Member, National Board of Medical Examiners, Test Material Development Committee (TMDC)

for Physiology (1996 - 1998)

Lung Biology and Pathology Study Section, National Institutes of Health (1994-1998)

Amer­ican Lung Asso­ciation/American Thoracic Society Research Grant Peer Re­view Committee (1990-1992, 2004-2005)

***Ad hoc-reviewer-NIH***

1. RIBT  Respiratory Integrative Biology and Translational Research Study Section  Internet Assisted Meeting Non-Standing Member Regular  2013
2. RIBT  Respiratory Integrative Biology and Translational Research Study Section  Regular Non-Standing Member Regular  2013
3. ZHL1 CSR-Q (F1)  Translational Programs in Lung Diseases  Telephone Assisted Meeting Non-Standing Member Regular (CHR)  2012
4. RIBT  Respiratory Integrative Biology and Translational Research Study Section  Regular Non-Standing Member Teleconference  2012
5. ZHL1 CSR-H (M1)  Pulmonary Vascular - Right Ventricular Axis Research Program  Regular Non-Standing Member Regular  2012
6. ZHL1 CSR-Q (F1)  Translational Programs in Lung Diseases  Regular Non-Standing Member Regular (CHR)  2011
7. ZHL1 PPG-A (M1)  Translational Programs in Lung Disease  Regular Non-Standing Member Regular  2011
8. HLBP (03)  Heart, Lung, and Blood Program Project Review Committee  Telephone Assisted Meeting Non-Member Teleconference  2011
9. ZES1 JAB-G (VT)  Virtual Consortium for Transdisciplinary/Translational Environmental Research (VICTER)  Regular Non-Standing Member Regular  2010
10. HLBP  Heart, Lung, and Blood Program Project Review Committee  Regular Non-Member Regular  2009
11. HLBP  Heart, Lung, and Blood Program Project Review Committee  Regular Non-Member Regular  2009
12. LIRR  Lung Injury, Repair, and Remodeling Study Section  Regular Non-Standing Member Regular  2009
13. ZRG1 CVRS-B (58)  RFA-OD-09-003: Challenge Grants Panel 19  Regular Non-Standing Member Outside Opinion/Mail Reviewer  2009
14. ZAA1 BB (94)  ALCOHOL AND LUNG BIOLOGY CENTER  Other Non-Standing Member Regular  2007
15. ZES1 JAB-C (DI)  Disease Investigation through Specialized Clinical Oriented Ventures in Environmental Research (DISCOVER)  Regular Non-Standing Member Regular  2007
16. ZES1 JAB-C (AM)  Administrative Meeting for DISCOVER  Telephone Assisted Meeting Non-Standing Member Teleconference  2007
17. HLBP  Heart, Lung, and Blood Program Project Review Committee  Regular Non-Member Regular  2007
18. HLBP  Heart, Lung, and Blood Program Project Review Committee  Regular Non-Member Regular  2006
19. ZNS1 SRB-R (23)  CounterACT-U54  Regular Non-Standing Member Regular  2006
20. ZHL1 CSR-A (M1)  Specialized Center (P50s)  Regular Non-Standing Member Regular  2006
21. LIRR  Lung Injury, Repair, and Remodeling Study Section  Regular Non-Standing Member Regular  2005
22. HLBP  Heart, Lung, and Blood Program Project Review Committee  Regular Non-Member Regular  2005
23. HLBP  Heart, Lung, and Blood Program Project Review Committee  Regular Non-Member Regular  2005
24. HLBP  Heart, Lung, and Blood Program Project Review Committee  Regular Non-Member Regular  2003
25. ZHL1 CSR-R (M1)  Acute Lung Injury SCCOR RFA-HL-02-014  Regular Non-Standing Member Regular  2003
26. ZHL1 CSR-M (F2)  Mentored Scientist Development Award  Regular Non-Standing Member Regular  2002
27. ZAA1 AA (72)  Workgroup-GUIDOT Reverse Site Visit  Site Visit Non-Member Regular  2002
28. LBPA  Lung Biology and Pathology Study Section  Regular Non-Standing Member Regular  2002
29. HLBP  Heart, Lung, and Blood Program Project Review Committee  Regular Non-Member Regular  2002
30. CABSCB  Basic Sciences  Site Visit Non-Member Regular  2001
31. HLBP  Heart, Lung, and Blood Program Project Review Committee  Regular Non-Member Regular  2001
32. ZRG1 SSS-3 (03)  Center for Scientific Review Special Emphasis Panel  Other Non-Standing Member Regular (CHR)  2001
33. BM-2  Bacteriology and Mycology Subcommittee 2  Regular Non-Standing Member Teleconference  2000
34. ZRG1 RAP (02)  Center for Scientific Review Special Emphasis Panel  Telephone Assisted Meeting Non-Standing Member Regular (CHR)  2000
35. HLBP  Heart, Lung, and Blood Program Project Review Committee  Regular Non-Member Regular  2000
36. ZRG1 RAP (01)  Center for Scientific Review Special Emphasis Panel  Regular Non-Standing Member Regular  1999
37. ZRG1 RAP (01)  Center for Scientific Review Special Emphasis Panel  Regular Non-Standing Member Regular (CHR)  1998
38. ZRG1 LBPA (01)  Center for Scientific Review Special Emphasis Panel  Regular Non-Standing Member Regular (CHR)  1998
39. ZHL1 CSR-Q (S1)  National Heart, Lung, and Blood Institute Special Emphasis Panel  Regular Non-Standing Member Outside Opinion/Mail Reviewer  1998
40. ZHL1 CSR-H (M1)  Specialized Centers of Research in Acute Lung Injury  Regular Non-Standing Member Regular  1998
41. ZRG2 PHY (01)  Biological and Physiological Sciences Special Emphasis Panel  Regular Non-Standing Member Regular (CHR)  1997
42. ZRG2 Biological and Physiological Sciences Special Emphasis Panel     1997
43. Consultant, NHLBI Special Review Committee, 1995
44. Consultant, NHLBI Reverse Site Visit, January 1993
45. Consultant, NHLBI Reverse Site Visit, February 1993
46. Consultant, NHLBI Special Review Committee, March 1993
47. Consultant, NHLBI Special Review Committee, May 1993
48. Consultant, NHLBI Specialized Centers of Research (SCORs), 1991
49. Consultant, NIHLB Program Project Grant Review, University of Nebraska Medical Center, 1991
50. NIH HED Study Section, 1991

***Ad hoc reviewer: other organizations***

United States Department of Veterans Affairs, 1996

External reviewer, Naval Medical Research and Development Basic Research Program, 1996

External reviewer, Ministry of Health, Research Unit, Ontario, Canada, 1996

U.S. Department of the Interior, Bureau of Mines, 1994-1995

Pulmonary Study Section for Tobacco-Related Disease Research Program (TRDRP), 1991-1994

Medical Research Council of Canada, Ottawa, Canada, 1991, 1994

Naval Medical Research and Development Basic Research Review Panel, Febru­ary 1990

**MEMBERSHIP ON EDITORIAL BOARDS**

*Encyclopedia of Respiratory Medicine, Major Reference Works*, Elsevier Ltd. (2004)

*SHOCK* (2001-2004)

*American Journal of Respiratory Cell and Molecular Biology* (1999-present)

*American Journal of Physiology: Lung Cellular and Molecular Physiology* (1994-2013)

*Journal of Applied Physiology* (1991- 1995)

**ASSOCIATE EDITORSHIPS**

*News in Physiological Sciences* (1997-2003)

*American Journal of Respiratory Cell and Molecular Biology* (2003-2006)

Deputy Editor, *American Journal of Respiratory Cell and Molecular Biology* (2006-2011)

**EDITORSHIPS**

Editor In Chief, *American Journal of Physiology-Lung Cellular and Molecular Physiology* (2011 – present)

**MEMBER EXTERNAL ADVISORY COMMITTEES**

Chair, Oklahoma State University, COBRE grant “Oklahoma Center for Respiratory and Infectious Diseases”, 2011 to present

University of South Alabama, Lung Center, Program Project Grant (2000-2011)

Northwestern University, Department of Medicine, Division of Pulmonary and Critical Care Medicine, Program Project Grant (2008)

**RESEARCH INTERESTS**

**A. Mechanisms of injury of surfactant proteins by reactive oxygen-nitrogen intermediates: structure-function relationships.** Electrospray mass spectrometry and a variety of biochemical (including site directed mutagenesis) and physiological techniques have been used to show that exposure of surfactant proteins A (SP-A), and D (SP-D), to reactive oxygen nitrogen species *in vitro* and *in vivo*, causes post translational modification (such as nitration of specific tyrosines in the carbohydrate recognition domains). We assess how changes in structure correlate with the decreased ability of SP-A and SP-D to facilitate aggregation and killing of pathogens. These studies impact our ability to understand the fundamental mechanisms of innate immunity. ***Publications:*** [Myeloperoxidase-dependent inactivation of surfactant protein D in vitro and in vivo.](http://www.ncbi.nlm.nih.gov/pubmed/20228064) J Biol Chem. 2010 May 28;285(22):16757-70. Epub 2010 Mar 12.PMID: 20228064. [Modification of surfactant protein D by reactive oxygen-nitrogen intermediates is accompanied by loss of aggregating activity, in vitro and in vivo.](http://www.ncbi.nlm.nih.gov/pubmed/19126597) FASEB J. 2009 May;23(5):1415-30. Epub 2009 Jan 6.PMID: 19126597

**B. Modification of lung epithelial ion transporters and lung fluid balance by reactive oxygen-nitrogen intermediates.** Nitric oxide and reactive oxygen nitrogen intermediates (formed by the reactions of nitric oxide with partially reduced oxygen species), generated in close proximity of epithelial cell membranes by activated inflammatory cells, modulate the activity of amiloride sensitive epithelial sodium (ENaC) and cAMP-activated chloride (CFTR) channels via signal transduction mechanisms (such as activating PKG and PKC) or by post-translational oxidative modifications of sodium channel proteins and their chaperones. Channel activity (and vectorial sodium transport) may be either increased or decreased depending on levels of reactive intermediates and length of exposure. The following techniques are utilized in these experiments: patching primary or cultured cells in the cell attached and whole cell mode; expressing various subunits of ENaC and CFTR in oocytes; immunoprecipation of ion transporting proteins from whole lungs or epithelial cells; measuring the ion transport properties of epithelial cells forming confluent monolayers in Ussing chambers; measuring ion transport across the alveolar and airway epithelial of anesthetized mice; patching epithelial cells *in situ*. ***Publications:*** [Inhibition of lung fluid clearance and epithelial Na+ channels by chlorine, hypochlorous acid, and chloramines.](http://www.ncbi.nlm.nih.gov/pubmed/20106988) J Biol Chem. 2010 Mar 26;285(13):9716-28. PMID: 20106988. [Mechanisms of cystic fibrosis transmembrane conductance regulator activation by S-nitrosoglutathione.](http://www.ncbi.nlm.nih.gov/pubmed/16421103) J Biol Chem. 2006 Apr 7;281(14):9190-9. Epub 2006 Jan 17.PMID: 16421103

**C. Viral induced injury to the mammalian alveolar epithelium.** Influenza (flu) is a contagious respiratory illness caused by flu viruses, leading to about 36,000 deaths every year in the United States alone, with the potential for at least a tenfold increase in epidemic and pandemic scenarios. **Respiratory Syncytial Virus (RSV)** is a member of the pneumovirus genus of the *paramyxoviridae*, and has a negative-sense, non-segmented, single-stranded RNA genome. It is the most common cause of lower respiratory tract disease in infants and children worldwide, is a frequent initiator of acute asthma exacerbations in young children, and has a disease impact comparable to that of non-pandemic influenza A in the elderly. We are currently using a variety of biophysical, molecular biology and physiological techniques to assess the basic mechanisms by which viral proteins and active replicating viruses interact with and modulate key functions of the alveolar epithelium both *in vitro* and *in vivo*. Results of these studies help us formulate new strategies for decreasing rhinnorhea and pulmonary edema, common consequences of viral infections**. *Publications:*** [Influenza virus M2 protein inhibits epithelial sodium channels by increasing reactive oxygen species.](http://www.ncbi.nlm.nih.gov/pubmed/19596899) FASEB J. 2009 Nov;23(11):3829-42. Epub 2009 Jul 13.PMID: 19596899. [Respiratory syncytial virus inhibits lung epithelial Na+ channels by up-regulating inducible nitric-oxide synthase.](http://www.ncbi.nlm.nih.gov/pubmed/19131335) J Biol Chem. 2009 Mar 13;284(11):7294-306. Epub 2009 Jan 8.

**D. Developing countermeasures against oxidant gases.** Chlorine (Cl2) is a highly irritant and reactive gas produced in large quantities throughout the world. Exposure to Cl2 released into the atmosphere during transportation and industrial accidents as well as during acts of terrorism, has resulted in significant morbidity and mortality to both humans and animals. Physiological and biophysical and biochemical studies utilizing *in vitro* systems and animals exposed to chlorine gas have helped us elucidate the biochemical mechanisms responsible for chlorine injury to pulmonary and extrapulmonary targets ***Publications***: [Elucidating mechanisms of chlorine toxicity: reaction kinetics, thermodynamics, and physiological implications.](http://www.ncbi.nlm.nih.gov/pubmed/20525917) Am J Physiol Lung Cell Mol Physiol. 2010; 299(3):L289-300. Epub 2010 Jun 4. Review.PMID: 20525917; [Inhibition of lung fluid clearance and epithelial Na+ channels by chlorine, hypochlorous acid and chloramines.](http://www.ncbi.nlm.nih.gov/pubmed/20106988) J Biol Chem. 2010 Mar 26;285(13):9716-28. PMID: 20106988; [Mechanisms and modification of chlorine-induced lung injury in animals.](http://www.ncbi.nlm.nih.gov/pubmed/20601632) Proc Am Thorac Soc. 2010 Jul;7(4):278-83. Review.PMID: 20601632; [Chlorine Gas Exposure Causes Systemic Endothelial Dysfunction by Inhibiting eNOS-dependent Signaling.](http://www.ncbi.nlm.nih.gov/pubmed/21131444) Am J Respir Cell Mol Biol. 2010 Dec 3. [Epub ahead of print]PMID: 21131444; [Post Exposure Administration of a {beta}2-Agonist Decreases Chlorine Induced Airway Hyper-Reactivity in Mice.](http://www.ncbi.nlm.nih.gov/pubmed/20855648) Am J Respir Cell Mol Biol. 2010 Sep 20. [Epub ahead of print]; PMID:20855648. Based on these studies we have formulated effective approaches to counteract this injury. Post exposure administration of **antioxidants**, **nitrite** or β2 agonists decreased pulmonary injury and improved survival in rodents exposed to Cl2 gas by a variety of mechanisms. ***Publications*** [Ascorbate and Deferoxamine Administration Post Chlorine Exposure Decrease Mortality and Lung Injury in Mice.](http://www.ncbi.nlm.nih.gov/pubmed/21131440) Am J Respir Cell Mol Biol. 2010 Dec 3. [Epub ahead of print]PMID: 21131440; PMID:21148791

**RESEARCH SUPPORT**

## Current

Source/Number: R21; NIEHS

Title: Mitochondrial Bioenergetic Dysfunction and Chlorine Toxicity

Role on Project: **Co-Principal Investigator (with Victor Darley-Usmar,**

**PhD)**

Dates: 10/01/2013 – 09/30/2015

Costs: Direct: $500,000 Indirect: $235,000 Total: $735,000

Source/Number: U01; NIEHS

Title: Nitrate Dependent Protection against Cl2 Gas Toxicity Role

of Chlorinated Lipids

Role on Project: **Co-Principal Investigator (with Rakesh P. Patel, PhD)**

Dates: 06/01/2013 – 05/30/2018

Costs: Direct: $2,084,170 Indirect: $648,825 Total: $2,732,995

Source/Number: 1R21ES022876-01 (NIEHS)

Title: Finding Effective Treatments for Inhaled Chlorine-Induced Injury Related Pain

Role on Project: **Co- Principal Investigator (10% effort)**

Dates: 09/28/2012 – 08/31/2014

Costs: Direct: $500,000 Indirect: $234,790 Total: $734,790

Source/Number: M13A11525 (A09055) (NIH)

Title: Accelerating Inflammation Resolution to CounterACT Chemical Injury

Role on Project: **Subcontract PI (P.I. Sven Jordt)**

Dates: 09/19/2012 – 08/31/2014

Costs: Direct: $80,000 Indirect: $37,200 Total: $117,200

Source/Number: 2R01DK060065-06A2 (NIDDK)

Title: Cell Biology of CFTR in Polarized Epithelia

Role on Project: **Co-Investigator (2% effort; P.I. James Collawn)**

Dates: 07/01/2001 – 07/30/2014

Costs: Direct: 2,674,243 Indirect: $1,243,528 Total: $3,917,771

Source/Number: 2U01ES015674 (NIEHS)

Title: Targeting Injury Pathways to Counteract Pulmonary Agent and Vesicant Toxicity

Role on Project: **Subcontract PI (7% effort; P.I. Sven Jordt)**

Dates: 08/22/2011 - 05/31/2016

Costs: Direct: $82,092 Indirect: $38,173 Total: $120,265

Source Number*:* GlaxoSmithKline

Title: Post Exposure Mitigation and Repair of Lung and Systemic Cl2

Induced Injury by Novel TRPV4 Inhibitors

Role on Project: **Principal Investigator (5% effort)**

Dates: 04/01/2013 – 03/31/2014

Costs: Direct: $46,817 Indirect: $21,770 Total: $68,587

**PAST RESEARCH SUPPORT (Principal Investigator Only**)

Source/Number: 2R01HL031197-24A1 (NHLBI)

Title: Mechanisms of ENaC Inhibition by Replicating Influenza Virus: Role of M2 Protein

Role on Project: **Principal Investigator (25% effort)**

Dates: 09/01/2009-06/30/2013

Costs: Direct: $1,097,499 Indirect: $438,792 Total: $1,536,291

Source/Number: Department of Commerce/Sea Grant Support (NOAA)

Title: Nanoparticle Induced Injury to Adult and Developing Lungs

Role on Project: **Principal Investigator**

Dates and Costs: 08/01/2009-7/31/2011

**Project Leader;**” Project 1: “Modification of the lung proteome by Nanoparticles” **Director of Administrative Core**

Costs: Direct: $469,140 Indirect: $213,160 Total: $682,300

Source/Number 3U54ES017218-02 (NIEHS)

Title: Novel Treatments of Chlorine Induced Lung Injury to the Cardiorespiratory Systems

Type: Center of Excellence (U54)

Dates and Costs: 09/01/08-05/31/2012

Role: **Principal Investigator of the U54; Project leader: Project**

**Director of the Administrative Core**

Costs: Direct: $2,760,909 Indirect: $841,473 Total: $3,602,382

Source/Number: 5U01ES015676-04 (NIEHS)

Title: Prevention and Treatment of Chlorine Gas Induced Injury to the Pulmonary System

Role on Project: **Principal Investigator**

Dates: 09/29/2006 -05/31/2012

Costs: Direct: $2,328,671 Indirect: $1,007838 Total: $3,336,509

Source/Number: U01ES015676-04S1 Administrative Supplement (NIH/NIEHS)

Title: Prevention and Treatment of Chlorine Induced Injury to the

Pulmonary System

Role on Project: **Principal Investigator**

Dates: 06/01/2011-05/31/2012

Costs: Direct: $175,000 Indirect: N/A Total: $175,000

Source/Number: 5R01HL075540-04 (NHLBI)

Title: Nitric oxide modulation of CFTR Expression and Function

Role on Project: **Principal Investigator**

Dates and Costs: 10/01/2004-11/30/2009; No Cost Extension

Source/Number: 7R01HL087017-02 (NHLBI)

Title: Regulation of Epithelial Sodium Channels by cGMP (PI: HongLong Ji; University of Texas, Tyler, TX)

Role on Project: **Principal Investigator of Subcontract to UAB**

Dates and Costs: 6/01/2007-01/31/09

Costs: $70,000 (direct costs)

Source/Number Sepracor, Inc.

Title: Mitigation of Chlorine Induced Injury by Brovana

Role on Project: **Principal Investigator**

Dates and Costs: 03/01/2007 – 02/28/2009 $120,127 (direct costs)

Source/Number: 5R37HL31197-23 (NHLBI)

Title: Pathophysiology of sublethal oxygen in injured lungs

Role on Project: **Principal Investigator (MERIT AWARD)**

Dates and Costs: 08/01/2002-07/31/2008; $1,175,000 (direct costs)

Source/Number Talecris Biotherapeutics, Inc.

Title: *In vitro* and *in vivo* studies on efficacy of aerosolized alpha1-antitrypsin

Role on Project: **Principal Investigator**

Dates and Costs: 05/01/2007- 07/31/2008 $38,000 (direct costs)

Source/Number: 1R01AI 71393 (NAIAD)

Title: Adaptation of Influenza Inhibition Assays for High-throughput Screening (PI: James Noah, SRI, Birmingham, AL)

Role on Project: **Principal Investigator** **of Subcontract to UAB**

Dates and Costs: 03/15/2006-08/31/2008; $65,000 (direct costs)

Source/Number: 5R01HL72871-04 (NHLBI)

Title: Modulation of Innate Immunity in Lung Transplantation

Role on Project: **Principal Investigator**

Dates and Costs: 09/30/2002- 07/31/2008; $875,000 (direct costs)

Source/Number: Inspire Pharmaceuticals

Title: Assessment of a novelP2Y receptor antagonist in preventing RSV induced injury to the Alveolar epithelium in vivo

Role on Project: **Principal Investigator**

Dates and Costs: 07/15/2006-07/15/2007; $130,000 (direct costs)

Source/Number: 2R37 NIH-HL31197; Minority Postdoctoral Supplement for Dr. Ollie Kelly

Title: The pathophysiology of sublethal oxygen in injured lungs

Role on Project: **Principal Investigator (Post-doctoral fellow: Dr. Ollie Kelly)**

Dates and Costs: 12/15/2004-12/15/2006; $100,000 (direct costs)

Source/Number: NIH 2R01 HL51173

Title: Nitric oxide mediated injury to alveolar epithelium

Role on Project: **Principal Investigator**

Dates and Costs: 10/01/99-09/30/05; $1,291,709 (direct costs)

Source/Number: NIH-NIDDK P30 DK54781 (Sorscher)

Title: Cystic Fibrosis Gene Therapy Core Center (PI: Eric Sorscher)

Role on Project: **Principal Investigator of Core A**: **Animal Models and Delivery Core**

Dates and Costs: 01/01/99 – 12/31/03; 2,500,000 Total Core Award; $490,130 Core A Award (direct costs)

Source/Number: North Atlantic Treaty Organization Scientific Affairs Division

Title: Advanced Study Institute – *Etiology and Treatment of Acute Lung Injury*

Role on Project: **Director**

Dates and Costs: 01/01/99 – 12/31/01; $65,000

Source/Number: Office of Naval Research N00014-97-1-0309

Title: Gene transfer to the normal and injured alveolar epithelium: Implications in the treatment of acute respiratory distress syndrome

Role on Project: **Principal Investigator**

Dates and Costs: 01/01/97 –10/01/2000; $816,992

Source/Number: 2R37 NIH-HL31197-18

Title: The pathophysiology of sublethal oxygen in injured lungs

Role on Project: **Principal Investigator (MERIT AWARD)**

Dates and Costs: 08/01/97-07/31/02; $811,000

Source/Number: NIH Small Business Technol. Transfer R41 HL59003-01

Title: Augmentation of gene transfer by surfactant lipids

Role on Project: **Principal Investigator**

Dates and Costs: 10/01/97 - 09/30/99; $92,955

Source/Number: North Atlantic Treaty Organization Scientific Affairs Division

Title: Advanced Study Institute – Acute respiratory distress syndrome: Cellular and molecular mechanisms and clinical management

Role on Project: **Director**

Dates and Costs: 01/01/97 - 12/31/97; $100,000

Source/Number: 2R01 NIH-HL51173

Title: Nitric oxide mediated injury to alveolar epithelium

Role on Project: **Principal Investigator**

Dates and Costs: 08/01/94-07/31/00; $873,159 (one-year extension)

Source/Number: Wyeth Pediatric Neonatology Research Fund

Title: Nitrogen reactive species and lung injury

Role on Project **Principal Investigator**

Dates and Costs: 07/01/94-06/30-95; $3,500

Source/Number: Office of Naval Research #N00014-93-1-0785

Title: Drug delivery to normal and diseased lungs: A novel approach for the mitigation of Adult Respiratory Distress Syndrome-type injury

Role on Project: **Principal Investigator**

Dates and Costs: 06/15/93-011/30/96; $613,737

Source/Number: Burroughs Wellcome Company

Title: An international multicenter, double-blind, randomized, placebo-controlled study in the effect of continuous administration of aerosolized EXOSURF in patients with sepsis-induced adult respiratory distress syndrome (Clinical Trial)

Role on Project: **Co-Principal Investigator**

Dates and Costs: 04/92-11/93

Source/Number: Burroughs Wellcome Company

Title: An international multicenter, double-blind, randomized, placebo-controlled study in the effect of continuous administration of aerosolized EXOSURF in patients with trauma-induced adult respiratory distress syndrome (Clinical Trial)

Role on Project: **Co-Investigator**

Dates and Costs: 10/92 –11/93

Source/Number: Department of the Navy N00014-J-91-1277

Title: Mechanisms and modifications of pulmonary and systemic epi­the­lial function and structure by reactive oxygen species and proteases

Role on Project: **Principal Investigator**

Dates and Costs: 03/01/91-05/31/93; $467,193

Source/Number: Burroughs Wellcome Company

Title: Quantification of surfactant distribution in normal and diseased lungs

Role on Project: **Principal Investigator**

Dates and Costs: 11/01/90-10/31/93; $65,000

Source/Number: Department of the Navy

Title: Detection and modification of compromised epithelial function after systemic injury: Role of circulating reactive oxygen species and proteases

Role on Project: **Principal Investigator**

Dates and Costs: 6/15/89-6/14/91; $647,219

Source/Number: American Lung Association (Career Investigator Award)

Title: Mitigation of pulmonary hyperoxic injury by exogenous surfactant replacement

Role on Project: **Principal Investigator**

Dates and Costs:07/01/87-06/30/92; $175,000

Source/Number: James H. Cummings Foundation, Buffalo, NY

Title: Funds for the purchase of a Multi-Channel Analyzer and a Gamma Detector

Role on Project: **Principal Investigator**

Dates and Costs: 1984 (Equipment grant - $18,000)

Source/Number: NIH R01 NIH-HL 31197

Title: The pathophysiology of sublethal oxygen in injured lungs

Role on Project: **Principal Investigator**

Dates and Costs: 08/01/83-07/31/97; $1,800,000

Source/Number: NIH HL23190

Title: Convective gas transport and O2 and CO2 exchange

Project 4 Title: O2 toxicity and the cardiovascular system

Role on Project: **Project Leader**

Project 2 Title: Effects of hyperventilation on the cardiovascular system

Role on Project: **Project Leader**

Dates and Costs: 1978-1983; $253,241 (Project 4) and $131,856

(Project 2)

**Grants to trainees (Sadis Matalon, Mentor or Co-Investigator)**

Source/Number: Foundation for Anesthesia Education & Research

Title: PDE4 and IL-8-Dependent Inhibition of cAMP-Stimulated Alveolar Fluid Clearance Dates

Role on Project: **Co-Mentor (Mentee: Brant Wagener, M.D., Ph.D.)**

Dates: 07/01/2013 – 06/30/2014

Costs: Direct: $75,000 Indirect: N/A Total: $75,000

Source/Number:                  Parker B. Francis Foundation

Title: Differentiation of Regulatory Myeloid-Derived Cells by Reactive Oxygen Species

Role on Project: **Co-Mentor (Mentee: Jessy DeShane, PhD)**

Dates: 06/01/2013 - 06/01/2015

Costs: Direct: $100,000 Indirect: N/A Total: $100,000

Source/Number: NHLBI

Title: Regulation of lung epithelial sodium channels by cGMP

Dates and Costs: 02/01/2007-02/01/2012; $1,000,000 (direct costs)

Role on Project: **Co-Investigator; PI: Dr. Hong-long Ji**

Source/Number American Heart Association (National)

Title: Delta ENaC, a novel cGMP-activated pathway for alveolar fluid clearance

Principal Investigator: Hong-Long Ji, M.D

Dates and Costs: 01/01/2006-12/31/2009; $260,000

Role on Project: **Consultant and Sponsor**

Source/Number: NIH SERCA K01

Title: Na+ Transport Inhibition by Respiratory Syncytial Virus

Principal Investigator: Ian C Davis, D.V.M., Ph.D.

Dates and Costs: 10/01/2003-10/01/2008; $600,480

Role on Project: **Mentor and Sponsor**

Source/Number American Lung Association

Title: Modulation of ENaC Expression and Function During Mycoplasma Infection

Principal Investigator: Judy Hickman-Davis, D.V.M., Ph.D.

Dates and Costs: 07/01/2005-07/01/2007; $80,000

Role on Project: **Consultant/Sponsor**

Source/Number American Heart Association, Southern Affiliates

Title Mechanisms of Pathogen-Killing by Alveolar Macrophages and Surfactant Protein-A from the lungs of patients with the Acute Respiratory Distress Syndrome

Principal Investigator Sadis Matalon, PhD

Trainee: Philip O’Reilly, MD

Dates and Cost: 07/01/2002-07/1/2004; $70,000

Role on Project: **Principal Investigator**

Source/Number: Parker B. Francis Fellowship Foundation

Title: Gene discovery and expression analysis in the developing mouse lung

Principal Investigator: Lance Prince, M.D, Ph.D.

Dates and Costs: 2001-2004; $120,000

Role on Project: **Mentor and Sponsor**

Source/Number: Parker B. Francis Fellowship Foundation

Title: Modulation of epithelial sodium conductance by respiratory syncytial virus.

Principal Investigator: Ian Davis, D.V.M., Ph.D.

Dates and Costs: 2001-2004; $110,000

Role on Project: **Mentor and Sponsor**

Source/Number: NIH SERCA K01

Title: Innate mechanisms of mycoplasmal killing by Alveolar macrophages

Principal Investigator: Judy Hickman-Davis, D.V.M., Ph.D.

Dates and Costs: 07/01/99-06/30/04; $600,000

Role on Project: **Mentor and Sponsor**

Source/Number: Parker B. Francis Fellowship Foundation

Title: Surfactant protein A in antimycoplasmal defense

Principal Investigator: Judy Hickman-Davis, D.V.M.

Dates and Costs: 1998-2001; $110,000

Role on Project **Co-Mentor**

Source/Number: American Heart Association

Title: Effects of aortic occlusion-reperfusion and circulating xanthine oxidase on alveolar fluid clearance in rabbits

Principal Investigator: Vance G. Nielsen, M.D.

Dates and Costs: 1998-2000; $70,000

Role on Project: **Mentor and Sponsor**

Source/Number: Parker B. Francis Fellowship Foundation

Title: Effects of reactive nitrogen species on Cl-secretion in airway epithelial cells

Principal Investigator: Michael DuVall, DVM, Ph.D.

Dates and Costs: 01/7/96-01/7/99; $108,000

Role on Project: **Mentor and Sponsor**

Source/Number: National Institutes of Health (NRCDA)

Title: Mechanisms of nitric oxide injury to lung surfactant

Principal Investigator: Machelle Manuel, Ph.D.

Date and Costs: 01/7/96-01/7/99; $88,000 (Grant terminated; Dr. Manuel accepted faculty position)

Role on Project: **Mentor and Sponsor**

Source/Number: Cystic Fibrosis Foundation

Title: Nitric oxide toxicity during gene therapy

Principal Investigator: Imad Y. Haddad, M.D.

Dates and Costs: 01/95-12/96; $98,000

Role on Project: **Mentor and Sponsor**

Source/Number: Child Health Research Center, NIH

Title: Reactive nitrogen species injury to pulmonary surfactant

Principal Investigator: Imad Y. Haddad, M.D.

Dates and Costs: 1993-1996; $90,000

Role on Project: **Mentor and Sponsor**

**TRAINEES**

**Current Trainees Training Period Position**

Ahmed Lazrak, Dr. Sc. 2007 – Present Assistant Professor of Anesthesiology

James Londino 2009 – Present PhD Graduate Student, Cell Biology

Asta Jurkuvenaite, PhD 2010 – Present Post-doctoral Fellow

Jessy S. Deshane, PhD 2013 – 2016 Parker B. Francis Fellow (Co-Mentor)

Brant Michael Wagener, MD 2013 – 2014 FAER Award (Co-Mentor)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Past Trainees** |  | **Training Period** |  | **Last Known Position** |
| Weifeng Song, MD, PhD  (Assistant Professor) |  | 2006 - 2011 |  | Resident, Department of Anesthesiology, School of Medicine, University of Alabama at Birmingham  Birmingham, Alabama |
|  |  |  |  |  |
| Artistotelis Filippidis, MD (Visiting Scientist) |  | 2010 – 2011 |  | Post-Doctoral Fellow, Department of Neurology, University of Virginia  Charlottesville, VA |
|  |  |  |  |  |
| Sotirios Zarogiannis, PhD (Post-doctoral Fellow) |  | 2010 – 2011 |  | Assistant Professor of Physiology, Department of Physiology  University of Thessaly  Larisa, Greece |
|  |  |  |  |  |
| Amit K. Yadav, MD  (Graduate student, School of Public Health) |  | 2008-2010 |  | Student, Masters Program in Environmental Health Sciences, School of Public Health, University of Alabama at Birmingham  Birmingham, Alabama |
|  |  |  |  |  |
| Shipeng Wei, MD  (Post-doctoral fellow) |  | 2007 -2009 |  | Assistant Professor of Medicine, Department of Cardiology, the Fourth Affiliated Hospital of Harbin Medical University  Harbin, People's Republic of China |
|  |  |  |  |  |
| Kokilavani Vedagiri,PhD (Post-doctoral fellow) |  | 2007 –2009 |  | Post-doctoral fellow, University of Madras  Chennai, India |
|  |  |  |  |  |
| Devipriya Subramaniyam  (Visiting Scholar) |  | 2007- 2009 |  | Doctoral Degree Candidate,  Hannover Medical School  Hannover, Germany |
|  |  |  |  |  |
| Andreas Bracher  (Thesis advisee, IMC University of Applied Sciences, Krems, Austria) |  | 2007- 2008 |  | PhD Student, Skin and Endothelium Research Division, Medical University Vienna  Vienna, Austria |
|  |  |  |  |  |
| Yongjian Zhou, MD  (Visiting Scientist) Hospital of Guangzhou, P.R. China |  | 2006- 2007 |  | Professor of Medicine, Department of Gastroenterology and Hepatology, First People’s Hospital of Guangzhou  Guangzhou, People’s Republic of China |
|  |  |  |  |  |
| Alexander Swoboda  (Thesis advisee, IMC University of Applied Sciences, Krems, Austria) |  | 2006-2007 |  | PhD Student, Skin and Endothelium Research Division, Medical University Vienna  Vienna, Austria |
|  |  |  |  |  |
| Martin Leustik  (Thesis advisee, IMC University of Applied Sciences, Krems, Austria) |  | 2006-2007 |  | PhD student, Institute of Medical Microbiology, Giessen University  Giessen, Germany |
|  |  |  |  |  |
| Izabela Nita  (Visiting Scholar) |  | 2006-2007 |  | PhD student, Lund University  Malmo, Sweden |
|  |  |  |  |  |
| Hong-Long Ji, MD  (Research Instructor) |  |  |  | Associate Professor, Department of Biochemistry, University of Texas Health Center at Tyler  Tyler, Texas |
|  |  |  |  |  |
| G. Alejandro F. Perez, MD  (Post-doctoral fellow) |  | 2005-2006 |  | Unknown |
|  |  |  |  |  |
| Ollie Kelly, MD  (Research Instructor) |  | 2004-2006 |  | Department of Pathology and Laboratory Medicine, University of California-Los Angeles  Los Angeles, CA |
|  |  |  |  |  |
| Nina German Hall, PhD, RD, LD  (Post-doctoral fellow) |  | 2003-2005 |  | Registered Dietician, Nutritionist  Private Practice  McDonough, GA |
|  |  |  |  |  |
| Lance Prince, MD, PhD  (Assstant Professor of Pediatrics, Parker B. Francis Fellow) |  | 2003-2005 |  | Assistant Professor, Vanderbilt University School of Medicine  Nashville, TN |
|  |  |  |  |  |
| Sricharan Moturi, MD, MPH  (Graduate student) |  | 2003-2004 |  | Post-doctoral Fellow, Child & Adolescent Psychiatry, Northwestern University  Chicago, IL  Post-doctoral Fellow, Sleep Medicine/Pediatric Sleep Medicine, University of Alabama at Birmingham  Birmingham, AL  Private Practice, Middle Tennessee Psychiatric Clinic  Nashville, TN |
|  |  |  |  |  |
| Veronica Swystun, PhD  (Graduate student in Physiology and Biophysics, PhD awarded in 2005) |  | 2001-2005 |  | Manager, Strategic Partnership Program  University of Calgary  Calgary, Alberta, Canada |
|  |  |  |  |  |
| Zsuzsanna Bebok, MD  (Post-doctoral fellow, joint supervision with Dr. Eric Sorscher) |  | 2000-2002 |  | Associate Professor, Cell Biology  University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Nandor Marczin, MD  (Visiting Scholar) |  | 2000 |  | Clinical Senior Lecturer, Program Director of Clinical Academic Training in Anesthesia, Coordinator of the Perioperative Medicine Module of BSc in Surgery and Anesthesia, Imperial College  London, UK  Honorary Consultant in Adult Cardiothoracic Anesthesia, Royal Brompton and Harefield NHS Foundation Trust  London, UK |
|  |  |  |  |  |
| Karin Hardiman, MD, PhD  (Graduate Student; Master’s degree in Physiology 2000; PhD awarded in 2003) |  | 1999-2004 |  | Surgical Fellow, Oregon Health and Science University  Portland, OR |
|  |  |  |  |  |
| Philip O’Reilly, MD  (Clinical Fellow in Pulmonary Medicine) |  | 1999-2004 |  | Assistant Professor, Pulmonary, Allergy and Critical Care Medicine, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Charles Venglarik, PhD  (Post-doctoral fellow) |  | 1999-2001 |  | Biology Instructor  Jefferson State Community College  Birmingham, AL |
|  |  |  |  |  |
| Ian C. Davis, DVM, PhD  (Research Instructor in Ansthesiology, Parker B. Francis Fellow) |  | 1998-2006 |  | Assistant Professor, Veterinary Biosciences, Department of Veterinary Medicine, Ohio State University  Columbus, OH |
|  |  |  |  |  |
| Ulrich H. Thome, MD  (Clinical Fellow in Pediatrics) |  | 1998-2001 |  | Department of Neonatology, University of Leipzig  Leipzig, Germany |
|  |  |  |  |  |
| Judy M. Hickman-Davis, DVM, PhD (Research Instructor in Ansthesiology, Parker B. Francis Fellow) |  | 1998-1999 |  | Assistant Professor of Clinical, Veterinary Preventive Medicine, Ohio State University  Columbus, OH |
|  |  |  |  |  |
| Ahmed Lazrak, Dr.Sc.  (Post-doctoral fellow) |  | 1997-2004 |  | Assistant Professor, Department of Anesthesiology, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Arabinda Samanta, PhD  (Research Assistant Professor) |  | 1997-1999 |  | Research Assistant Professor, Department of Surgery, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Tamas Jilling, MD  (Post-doctoral fellow) |  | 1997-1998 |  | The Ellrodt-Schweighauser Family Chair of Perinatal Research, Department of Pediatrics, NorthShore University HealthSystem  Evanston, IL |
|  |  |  |  |  |
| S. Machelle Manuel, PhD  (Post-doctoral fellow) |  | 1996-1997 |  | Senior Director, Medical and Scientific Affairs, Daiichi Sankyo, Inc.  Parsippany, NJ |
|  |  |  |  |  |
| Michael DuVall, DVM, PhD  (Post-doctoral fellow) |  | 1995-1998 |  | Associate Directory, Toxicology,  Abbott Laboratories  Chicago, IL |
|  |  |  |  |  |
| Sha Zhu, MD, PhD  (Post-doctoral fellow) |  | 1994-2000 |  | Statistician, Preventive Medicine,  University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Yi Guo, PhD  (Post-doctoral fellow) |  | 1994-1997 |  | Research Associate, DuPont Hospital  Wilmington, DE |
|  |  |  |  |  |
| Glenda Davis  (Research Assistant, Research Associate) |  | 1993-1996,  1998-2007 |  | Manager, Office of Research Compliance, University of Alabama  Tuscaloosa, AL |
|  |  |  |  |  |
| Javier Cifuentes, MD  (Clinical Fellow in Neonatology) |  | 1993-1995 |  | Assistant Professor of Pediatrics,  Division of Neonatology,  Pontifical Catholic University of Chile  Santiago, Chile |
|  |  |  |  |  |
| Imad Y. Haddad, MD  (Assistant Professor of Pediatrics) |  | 1992-1997 |  | Division Head, Pediatric Critical Care  Medical Director, Pediatric Intensive Care Unit,  Banner Medical Group  Phoenix, AZ |
|  |  |  |  |  |
| Joyce F. Haskell, PhD  (Post-doctoral fellow) |  | 1992-1994 |  | Research Associate, Department of Biochemistry, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Gyorgy Pataki, MD  (Post-doctoral fellow) |  | 1992-1994 |  | Internal Medicine,  Novato Community Hospital,  Sutter Pacific Medical Foundation  Greenbrae, CA |
|  |  |  |  |  |
| William J. Russell, PhD  (Post-doctoral fellow) |  | 1992-1993 |  | Research Scientist, Veterans Administration Medical Center  Shreveport, LA |
|  |  |  |  |  |
| Laszlo Czoph, MD  (Post-doctoral fellow) |  | 1992-1993 |  | Assistant Professor of Internal Medicine, University Medical School  Pecs, Hungary |
|  |  |  |  |  |
| Carpantanto Myles, MSM, CIM  (Research Assistant,  Research Associate) |  | 1991-2005 |  | Director & Research Compliance Officer, Office of Research Compliance, University of Alabama  Tuscaloosa, AL |
|  |  |  |  |  |
| Ping Hu, MD, RN  (Post-doctoral fellow) |  | 1991-1997 |  | Nurse, Bone Marrow Transplant Unit, University of Alabama at Birmingham Hospital  Birmingham, AL |
|  |  |  |  |  |
| Gang Yue, MD, PhD  (Post-doctoral fellow 1991-1993, graduate student in Physiology and Biophysics, PhD awarded in 1996) |  | 1991-1996 |  | Anatomic Pathology & Clinical Pathology, Pathology – Hematology,  Wilson Memorial Regional Medical Center Johnson City, NY |
|  |  |  |  |  |
| Martin L. Bauer, MD  (Clinical Fellow in Pediatric Pulmonology) |  | 1991-1993 |  | Associate Professor of Pediatrics,  Arkansas Children’s Hospital,  University of Arkansas for Medical Sciences, College of Medicine  Little Rock, AR |
|  |  |  |  |  |
| Michele Barnard (Perry),PhD (Post-doctoral fellow) |  | 1990-1992 |  | Chief of Special Emphasis Panels Section 1, Review Branch  National Institute of Diabetes and Digestive and Kidney Diseases Bethesda, MD |
|  |  |  |  |  |
| Vance G. Nielsen, MD  (Assistant Professor of Anesthesiology) |  | 1990-1991,  1998-2000 |  | Professor & Director of Anesthesiology Research, Drexel University College of Medicine  Philadelphia, Pennsylvania |
|  |  |  |  |  |
| Paul C. Engstrom, MD  (Clinical Fellow in Neonatology) |  | 1988-1990 |  | Director, Neonatal Transport Program  Director of Resident Recruitment,  Department of Pediatrics  [Department of Pediatrics](http://findadoctor.carolinasmedicalcenter.org/directory/list.asp?setsize=3000&department=Department+of+Pediatrics&setindex=0&view=), [Division of Neonatology](http://findadoctor.carolinasmedicalcenter.org/directory/list.asp?setsize=3000&division=Division+of+Neonatology&setindex=0&view=), Levine Children's Hospital Charlotte, NC |
|  |  |  |  |  |
| R. Randall Baker, PhD, RRT, RCPT (Graduate Student, PhD in Biophysics) |  | 1987-1992 |  | Chair of Respiratory Therapy, Associate Professor of Graduate Studies, Respiratory Therapy, Anesthesiology and Perioperative Medicine  Medical College of Georgia, Augusta, GA |
|  |  |  |  |  |
| Lori Milanowski  (Student; Nurse Anesthesia Program) |  | 1986-1988 |  | Unknown |
|  |  |  |  |  |
| Gregory M. Loewen, DO, FCCP (Clinical Fellow in Pulmonary Medicine) |  | 1986-1988 |  | Last academic appointment: Professor, Department of Medicine, Roswell Park Cancer Institute,  Buffalo, NY  Private practice  Spokane, WA |
|  |  |  |  |  |
| Mary J. Laughlin, MD  (Medical Student; Honors thesis) |  | 1983-1985 |  | Founder and Medical Director, Abraham J. & Phyllis Katz Cord Blood Foundation;  Founder and Medical Director, Cleveland Cord Blood Center;  Associate Professor of Medicine, Pathology, Case Western Reserve University/Case Comprehensive Cancer Center  Cleveland, OH |
|  |  |  |  |  |
| Bruce A. Holm, PhD – *dec.*  (Graduate Student in Toxicology; University of Rochester) |  | 1983-1987 |  | SUNY Distinguished Professor of Pediatrics, Gynecology-Obstetrics, and Pharmacology and Toxicology, Senior Vice Provost at the State University of New York at Buffalo, Executive Director of the University's Center of Excellence in Bioinformatics and Life Sciences  Buffalo, NY |
|  |  |  |  |  |

**MEMBERSHIP ON UAB STUDENT GRADUATE COMMITTEES**

|  |  |  |
| --- | --- | --- |
| **Student** | **Role** | **Degree Awarded** |
|  |  |  |
| Colm Atkins | Member | PhD Candidate in Biochemistry and Molecular Genetics |
|  |  |  |
| James Londino | Mentor | PhD Candidate in Cell Biology |
|  |  |  |
| Artistotelis Filippidis, MD  (Visiting Scientist) | Member | PhD Candidate in Physiology, University of Thessaly, Larisa, Greece |
|  |  |  |
| Amit K. Yadav, MD | Mentor | Master of Science in Environmental Health Sciences, School of Public Health, 2010 |
|  |  |  |
| Dario A. Vitturi, PhD | Member | PhD in Molecular and Cellular Pathology, 2010 |
|  |  |  |
| Veronica Swystun, PhD | Mentor | PhD in Physiology and Biophysics, 2005 |
|  |  |  |
| Sricharan Moturi, MD, MPH | Member | Masters degree in Public Health, 2003; MD, 2001 |
|  |  |  |
| Karin Hardiman, MD, PhD | Mentor | MD, 2004; PhD in Physiology and Biophysics, 2002; Masters degree in Physiology, 2000 |
|  |  |  |
| Ian C. Davis, DVM, PhD | Member | PhD in Pathology, 2000 |
|  |  |  |
| Judy M. Hickman-Davis, DVM, PhD | Member | PhD in Pathology, 1998 |
|  |  |  |
| Gang Yue, MD, PhD | Mentor | PhD in Physiology and Biophysics, 1996 |
|  |  |  |
| R. Randall Baker, PhD, RRT, RCPT | Member | PhD in Physiolgy and Biophysics, 1991 |
|  |  |  |

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| --- | --- | --- | --- | --- |
| **Summer Students**  **and Interns** |  | **Training Period** |  | **Last Known Position** |
| Michael Clark |  | Summer 2013 |  | Medical Student, Mercer University School of Medicine  Savannah, GA |
|  |  |  |  |  |
| Susanna Basappa  (Summer in Biomedical Sciences (SIBS) Student) |  | Summer 2013 |  | Student, University of San Francisco  San Francisco, CA |
|  |  |  |  |  |
| Courtney Culbreath |  | Summer 2013 |  | Medical Student, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| LaDonna Patterson |  | August 2012 – February 2013 |  | Student, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Lisa Speake MacBeth |  | Summer 2012 |  | Medical Student, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Abhishek T. Haritha |  | Summer 2012 |  | Medical Student, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Adam T. Witcher |  | Summer 2012 |  | Medical Student, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Erica M. Johnson |  | Summer 2011  Summer 2009 |  | FAER Medical Student, University of Alabama at Birmingham Birmingham, AL |
|  |  |  |  |  |
| Michael D. Cochran |  | Summer 2011 |  | Medical Student, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Justin Jackson |  | Summer 2011  Summer 2009 |  | Medical Student, University of Alabama at Birmingham Birmingham, AL |
|  |  |  |  |  |
| Emily Ness |  | Summer 2011 |  | Student, Carleton College  Northfield, MN |
|  |  |  |  |  |
| Kate Trankina |  | Summer 2011 |  | Student, Vestavia Hills High School  Vestavia Hills, AL |
|  |  |  |  |  |
| Evan Fisher |  | Summer 2010 |  | Medical Student, University of Alabama at Birmingham, Birmingham, AL |
|  |  |  |  |  |
| Julia Belopolsky |  | Summer 2010 |  | Student, New York University  New York, New York |
|  |  |  |  |  |
| Larry Lawson  (McNair Research Summer Scholar, Who’s Who Among Students in American Universities and Colleges) |  | 2011  Summer 2010 |  | Student, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| James Zu  (CORD Mentor Program) |  | Summer 2010  Summer 2008 |  | Student, University of Pennsylvania  Philadelphia, PA  Student, Alabama School of Fine Arts  Birmingham, AL |
| Sarah McCurry |  | Summer 2007 |  | Medical Student, University of  Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| John Robert Walker |  | Summer 2007 |  | Anesthesiology Resident, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Colin Jones  (CORD Mentor Program) |  | Summer 2008  Summer 2007 |  | Student, University of Alabama  Tuscaloosa, AL |
|  |  |  |  |  |
| Abhishek T. Haritha (CORD Mentor Program) |  | Summer 2006 |  | MD/PhD student, University of Alabama at Birmingham  Birmingham, AL |
|  |  |  |  |  |
| Shaun Williams |  | Summer 2006 |  | Anesthesiology Resident, Emory University  Atlanta, GA |
|  |  |  |  |  |
| Jeffrey Brand |  | Summer 2006 |  | Graduate Student,  University of Alabama at Birmingham School of Public Health  Birmingham, AL |
|  |  |  |  |  |
| Namisha Patel |  | Summer 2005 |  | Medical Student, University of Alabama at Birmingham Birmingham, AL |
|  |  |  |  |  |
| Luke Crowder  (CORD Mentor Program) |  | Summer 2005 |  | Student, Ramsey High School Birmingham, AL |
|  |  |  |  |  |
| Aronica Cotton |  | Summer 2002 |  | Student, Smith College, Mellon Minority Program  Northampton, MA |
|  |  |  |  |  |
| Katie Brown |  | Summer 2001 |  | Medical Student, University of  South Alabama  Mobile, AL |
|  |  |  |  |  |
| Celeste Reese |  | Summer 2001 |  | Medical Student, Baylor University  Waco, TX |
|  |  |  |  |  |
| Scott Rose |  | Summer 2000 |  | Medical Engineer  Lutz, FL |
|  |  |  |  |  |
| Allen Pickens, MD |  | Summer 1999 |  | Assistant Professor, Thoracic Surgery, University of Michigan Medical School  Ann Arbor, MI |
|  |  |  |  |  |
| Tandeka Nix, MD |  | Summer 1999 |  | Private practice  Greenville, NC |
|  |  |  |  |  |
| Nathan Harris, RN |  | Summer 1998 |  | Staff Nurse, Intensive Care Unit, University of Alabama at Birmingham Hospital  Birmingham, AL |
|  |  |  |  |  |
| Khaled Basiouny, MD |  | 1998 – 2000 |  | Assistant Professor, Division of Trauma and Critical Care Surgery, Department of Surgery, University of North Carolina School of Medicine |
|  |  |  |  |  |
| Wayne V. Harper |  | 1984-1986 |  | Position unknown |
|  |  |  |  |  |
| Michael Cesar, MD |  | 1984-1985 |  | Department of Anesthesiology  Catholic Health Sisters of Charity Hospital, St. Joseph Campus  Cheektowaga, NY |
|  |  |  |  |  |
| Juliet M. Seigle, MD |  | 1983-1985 |  | Radiation Oncology,  Georgetown University Hospital  Washington, DC |
|  |  |  |  |  |
| MS Nesarajah, MD – *dec.* |  | 1981-1983 |  | Department of Physiology, State University of New York at Buffalo  Buffalo, NY |
|  |  |  |  |  |

**TEACHING ACTIVITIES**

2012-2013 Graduate Biomedical Science 751-Heart, Lung and Kidney; Respiration Section

2006 94 Epithelial Cell Physiology (Physiology & Biophysics)

2005-2006 Summer Research Fellowship

2005-2006 Student Research Internship

2005 Respiratory Physiology (Genetics- February)

2005 Respiratory Physiology (Dental & Optometry classes-

April 2005)

2005 Respiratory Physiology (under Jim Johnson)

2003-2004 Student Mentoring (Respiratory Distress Syndrome,

groups A, B, C)

2002 Student Research Internship (Aronica Cotton, McNair

Scholar)

2001-2003 1st Year Medical Students (Basic Science/Physiology-for Anesthesiology)

2001 790 Pulmonary Physiology (Ion transport across alveolar

epithelium)

1999 IBS 701 (Pathophysiology & Pharmacology of Disease)

1998 IBS-II course (Pulmonary Physiology & Pathophysiology)

1998-2004 Medical Physiology

1998 MS-1 Physiology (Mechanics of Breathing)

1995 Pulmonary Mechanics, II

**PATENTS AND INVENTIONS**

US Provisional Patent Application #61/052,414, “DPPC Formulations and Methods for Using”

(Filed May 12, 2008; Inventors: Dr. Elias I. Franses, Dr. Sook Heun Kim, Yoonjee Park and Dr. Sadis Matalon)

US Provisional Patent Application #60/573,558: “Methods for using pyrimidine synthesis inhibitors to increase airway epithelial cell fluid uptake.” (Filed May 21, 2004; Inventors: Dr. Ian C. Davis, Dr. Wayne Sullender and Dr. Sadis Matalon)

Converted to International PCT application (#PCT/US2005/017939); May 2005

**Articles in Public Press**

1. UAB Researchers Find Potential Treatment for RSV

<http://birmingham.medicalnewsinc.com/mod/secfile/viewed.php?file_id=16>

2. UAB forms new Lung Center

<http://www.al.com/news/birminghamnews/index.ssf?/base/news/1215677715250730.xml&coll=2>

<http://main.uab.edu/Sites/MediaRelations/articles/48572/>

# 3. Influenza

<http://www.al.com/birminghamnews/stories/index.ssf?/base/living/1232961375304380.xml&coll=2>

<http://www.nbc13.com/vtm/news/local/article/birmingham_ala._plays_key_role_in_swine_flu_research/70819/>

<http://blog.al.com/living-news/2009/07/new_research_being_done_at.html>

http://www.niehs.nih.gov/news/newsletter/2009/september/science-viralprotein.cfm

[www.youtube.com/watch?v=WMlH4z6NVpg](http://www.youtube.com/watch?v=WMlH4z6NVpg)

4. UAB taking up battle against chlorine arms

<http://www.al.com/news/birminghamnews/metro.ssf?/base/news/1223799389175680.xml&coll=2>

**PUBLICATIONS**

***Books Edited***

*Biomembranes and Free Radicals,* Elsevier, San Diego, CA, **S. Matalon** and Rakesh Patel (Eds.), 2008

*Etiology and Treatment of Acute Lung Injury: From Bench to Bedside*, IOS Press BV, Amsterdam, Netherlands, **S Matalon** and JI Sznajder (Eds.), 2001.

*Acute Respiratory Distress Syndrome: Cellular and Molecular Mechanisms and Clinical Management*, Plenum Publishing, New York, **S Matalon** and JI Sznajder (Eds.), 1998.

*Physiology of Oxygen Radicals*, Clinical Physiology Series, American Physiological Society, AE Taylor, **S Matalon**, and PA Ward (Eds.), 1986.

#### Book Chapters

Song, W., Lazrak, A. Wei, S. McArdle, P. and **Matalon, S.** Modulation of lung epithelial sodium channel function by nitric oxide (2008) In *Free Radical Effects on Membranes,* S. Matalon and R.P. Patel, (Eds.) Current Topics in Membranes, Elsevier, San Diego; Vol. 61, 43-69; 2008

Lang, D.J, Jr., Davis I.C., Patel R.P., and **Matalon, S**. (2008) Oxidadative and Nitrosative Lung Injury. Editors: Alfred P. Fishman, Jack A. Elias, Jay A. Fishman, Michael A. Grippi, Robert M. Senior, Allan I. Pack In *Fishman’s Pulmonary Diseases and Disorders,* Fourth Edition, Vol. I, 359-369, 2008

**Matalon, S**., J M Hickman-Davis and J R Wright. Surfactant Protein A (SP-A) (2006). Encyclopedia of Respiratory Medicine. Editors: Geoffrey J. Laurent and Steven D. Shapiro; Vol 4:143-148 2006

**Matalon, S**., Ian C. Davis, John D. Lang (2006). Involvement of reactive oxygen and nitrogen species in the pathogenesis of acute lung injury. In *Mechanisms of Sepsis Induced Organ Dysfunction & Recovery.* Editors: Edward Abraham, Mervyn Singer, Jean-Louis Vincent. Springer-Verlag Publishers, 97-111, 2006

Davis, I.C., Lang, J.D., and **Matalon, S**. (2005). Role of reactive oxygen and nitrogen species in lung injury. In *Lung Injury: Mechanisms, Pathophysiology and Therapy*. Editors: R.H. Notter, J.N. Finkelstein, and B.A. Holm. Marcel Dekker, Inc. Vol. 196, *227-268, 2005*

Wang, Z., Holm, B.A. **Matalon S** and Notter, R.H(2005). Surfactant Activity and Dysfunction in Lung Injury. In *Lung Injury: Mechanisms, Pathophysiology and Therapy*. Editors: R.H. Notter, J.N. Finkelstein, and B.A. Holm. Marcel Dekker, Inc. Vol. 196, 297-352, 2005

Davis, I.C., Prince, L and **Matalon S** (2005).Epithelial Sodium Channel Function in Health and Disease in the Adult Lung. In *Ion Channels in the Pulmonary Vasculature*, Editor: I. Yuan,Marcel Dekker, Inc. Vol. 197, 185-198, 2005.

Lorden, JF and **Matalon S**. Easing the Perils of the Postdoctoral Years. In *Change: The Magazine of Higher Learning*, 44-49, January/February 2002

Davis I., J. Hickman-Davis, J. R. Lindsey and **Matalon S.** Role of reactive oxygen and nitrogen species in lung injury. In: *Lung Biology in Health and Disease. Disease Markers in Exhaled Breath.* Executive Editor: Claude Lenfant; Section Editors: Nandor Marczin, Sergei Kharitonov, Magdi Yacoub and Peter J Barnes , New York, Marcel Dekker, NATO ASI Series; 159-199, 2002

Hickman-Davis JM, **Matalon S** and Lindsey JR. Transgenic mice in studies of host defense: Basic principles for good science. In: *Etiology and Treatment of Acute Lung Injury*, S. Matalon and I. Sznajder (Eds.) IOS Press, 248-253, 2001

Meriathefs P, Baltopoulos G and **Matalon S**. The two faces of nitric oxide (NO) (in Greek). *Hellenic Vascular Surgery* 9 (2): 13-21, 2000.

Haddad IY, Zhu S, Tilden SJ, and **Matalon S**. Mechanisms and Physiologic Sequelae of Reactive Species Injury to the Alveolar Epithelium. In: *Lung Biology in Health and Disease. Chronic Lung Disease in Early Infancy*. Executive Editor: Claude Lenfant; Section Editors: R. Bland and J. Coalson. New York, Marcel Dekker, Inc. pp431-456, 1999

**Matalon S**, Lazrak A, and DuVall MD**.** Inhibition of vectorial Na+ transport across alveolar epithelial cells by nitrogen-oxygen reactive species. In: *Current Topics in Membranes Vol 47*. Academic Press, San Diego, DM Fambrough and DJ Benos (Eds.), pp 219-234, 1999.

Guo Y, DuVall MD, and **Matalon S**. Biophysical properties of Na+ channels in alveolar epithelial cells. In: *Pulmonary Edema* (M Matthay and D Ingbar, Eds.) New York, Marcel Dekker, Inc., pp 457-472, 1998.

Zhu S, Manuel M, Haddad I, and **Matalon S**. Mechanisms of nitric oxide induced injury to the alveolar epithelium. In: *Acute Respiratory Distress Syndrome: Cellular and Molecular Mechanisms and Clinical Management*, Plenum Publishing, New York, S Matalon and JI Sznajder (Eds.) pp 345-354, 1998.

Hickman-Davis JM, **Matalon S**, and Lindsey JR. Macrophage killing of mycoplasmas: involvement of surfactant protein A and nitric oxide. In: *Acute Respiratory Distress Syndrome: Cellular and Molecular Mechanisms and Clinical Management*, Plenum Publishing, New York, S Matalon and JI Sznajder (Eds.), pp 355-364, 1998.

Tanaka S, Choe N, Hemenway DR, **Matalon S**, and Kagan E. Role of reactive nitrogen species in asbestos-induced pleuro-pulmonary injury. In: *Acute Respiratory Distress Syndrome: Cellular and Molecular Mechanisms and Clinical Management*, Plenum Publishing, New York, S Matalon and JI Sznajder (Eds.), pp 385-394, 1998.

Manuel M, Zhu S, **Matalon S**, and Haddad IY. The two faces of nitric oxide: tissue injury and protection. In: *Vascular Endothelium: Pharmacologic and Genetic Manipulation*, Plenum Publishing, New York, J Catravas (Ed.), pp 221-231, 1998.

**Matalon S**, Zhu S, Pataki Gy, and Haddad IY Injury to pulmonary surfactant by reactive oxygen and nitrogen species. In: *Correlations Between In Vitro and In Vivo Investigations in Inhalation Toxicology* (DL Dungworth, KB Adler, CC Harris, CG Plopper Editors) ILSI Press, Washington, D.C., pp 230-251, 1997.

DuVall M, Guo Y, Jackson RM and **Matalon S**. Regulation of alveolar epithelial Na+ channel expression and activity in hyperoxia. In: *Lung Biology in Health and Disease.* Executive Editor: Claude Lenfant; Section Editors: D. Massaro and L. Clerch. New York, Marcel Dekker, Inc. pp 339-366, 1997.

**Matalon S**, Haddad IY, and Pitt BR. Nitric Oxide and Lung Injury. In: *Pulmonary Diseases and Disorders*, edited by Fishman, A.P.McGraw-Hill, pp 335-346, 1997.

**Matalon S**, Oh Y, and Benos DJ. Epithelial cell Na+ and CI- channels. In: *Signal Transduction in Lung Cells* (JS Brody, DM Center and VA Tkachuk, Eds.) New York, Marcel Dekker Inc., pp 225-244, 1993.

**Matalon S**, Yue G, Hu P, Oh Y, and Benos DJ. Mechanisms of active Na+transport across freshly isolated and cultured adult alveolar type II pneumocytes. In: *Fluid and Solute Transport in the Airspaces of the Lungs* (R. Effros and H.K. Chang, Eds.) New York, Marcel Dekker, Inc.179-217, 1993.

Czopf L, Baker RR, Jilling T, Freeman BA, Kirk KL, and **Matalon S**. Lipsome entrapped antioxidant enzyme delivery to the alveoli of the lung. *Oxygen Free Radicals and Scavengers in the Natural Science*. Gy Mozsik, I Emeri, J Feher, B Matkovics, A Vincze (Eds.) 135-141. Akademiai Kiado, Budapest, 1993.

Royall JA and **Matalon S**. Pulmonary edema in ARDS. *Pediatric Critical Care.*  Fuhrman BP, Zimmerman JJ (Eds.) *,* St. Louis, MO, C.V. Mosby, pp. 445-458, 1992.

Holm BA and **Matalon S**. The effects of hyperoxia on type II cell surfactant synthesis. In: *Progress in Resp Res, Basic Research on Lung Surfactant*, P. von Wichert, B. Muller, (Eds.), pp. 291-293, 1990.

**Matalon S** and Holm BA. Intratracheal instillation of exogenous surfactant reduces pulmonary hyperoxic injury. In: *Progress in Resp Res. Basic Research on Lung Surfactant*, P von Wichert, B. Muller, (Eds.), pp. 318-320, 1990.

**Matalon S**, Baker RR, and Engstrom PC. Mechanisms and modifications of hyperoxic injury to the mammalian pulmonary surfactant system. In: *Clinical Aspects of Oxygen Transport and Tissue Oxygenation*, Springer Verlag, pp. 116-132, 1989.

Freeman BA, Jackson R, **Matalon S,** and Harding SM**.**  Biochemical and functional aspects of oxygen-mediated injury to vascular endothelium. In: *Vascular Endothelial Cell Biology*, Vol. III, Ryan US, (Ed.), CRC Press, pp. 13-31, 1988.

Freeman BA, Panus P, Beckman J, and **Matalon S**. Pulmonary vascular injury from reactive oxygen species. In: *The Role of Oxygen Radicals in Cardiovascular Diseases.* A. L’Abbate and F. Ursini, (Ed.), Kluwer Academic Publishers, pp. 201-215, 1988.

Holm BA, **Matalon S,** and Notter RH. Pulmonary surfactant effects and replacement in oxygen toxicity and other ARDS-type injuries. In: *Surfactant Replacement Therapy,* Springer-Verlag, Burkhard Lachmann (Ed.) pp. 224-244, 1988.

**Matalon S,** Bush R, and Harper WV. Modification of pulmonary oxygen toxicity by bleomycin treatment: Role of lung antioxidant enzymes. In: Rotilio G, ed., *Superoxide and Superoxide Dismutase in Chemistry, Biology and Medicine.* Elsevier Science Publishers, pp 528-531, 1986.

**Matalon S** and Nickerson PA. Alterations in mammalian blood-gas barrier exposed to hyperoxia. In: *Physiology of Oxygen Radicals.* Taylor AF, **Matalon S,** and Ward P, (Eds.), Am Physiol Soc 55-86, 1986.

Rahn H, **Matalon S,** and Sotherland PR. Circulatory changes in oxygen delivery in the chick embryo prior to hatching. Proceedings of the 21st Alfred Benson Symposium on Cardiovascular Shunt. In: *Cardiovascular Shunts* Johansen K and Burggren W, (Eds.), Munksgaard, Copenhagen, pp 199-215, 1985.

**Matalon S** and Farhi LE. O2 and CO2 exchange in liquid breathing-theory. In: *Progress in Respiratory Research and Gas Exchange Function of Normal and Diseased Lungs,* Vol. 16, Piiper J and Schied P, (Eds.), Karger Medical Publishers. Pp 278-279, 1981.

***Research Articles and Invited Reviews***

**In press or published**

[Inter-α-Inhibitor Blocks ENaC Activation and Decreases Nasal Potential Differences in ΔF508 Mice.](http://www.ncbi.nlm.nih.gov/pubmed/24303840) Lazrak A, Jurkuvenaite A, Ness EC, Zhang S, Woodworth BA, Muhlebach MS, Stober VP, Lim YP, Garantziotis S, Matalon S.

Am J Respir Cell Mol Biol. 2013 Dec 4. [Epub ahead of print] PMID: 24303840

[Unfolded protein response (UPR) signaling regulates arsenic trioxide-mediated macrophage innate immune function disruption.](http://www.ncbi.nlm.nih.gov/pubmed/23954561)

Srivastava RK, Li C, Chaudhary SC, Ballestas ME, Elmets CA, Robbins DJ, Matalon S, Deshane JS, Afaq F, Bickers DR, Athar M.

Toxicol Appl Pharmacol. 2013 Nov 1;272(3):879-87. doi: 10.1016/j.taap.2013.08.004. Epub 2013 Aug 14. PMID: 23954561

[Cigarette smoke and CFTR: implications in the pathogenesis of COPD.](http://www.ncbi.nlm.nih.gov/pubmed/23934925)

Rab A, Rowe SM, Raju SV, Bebok Z, Matalon S, Collawn JF.

Am J Physiol Lung Cell Mol Physiol. 2013 Oct 15;305(8):L530-41. doi: 10.1152/ajplung.00039.2013. Epub 2013 Aug 9. PMID: 23934925

[The silent codon change I507-ATC->ATT contributes to the severity of the ΔF508 CFTR channel dysfunction.](http://www.ncbi.nlm.nih.gov/pubmed/23907436)

Lazrak A, Fu L, Bali V, Bartoszewski R, Rab A, Havasi V, Keiles S, Kappes J, Kumar R, Lefkowitz E, Sorscher EJ, Matalon S, Collawn JF, Bebok Z.

FASEB J. 2013 Nov;27(11):4630-45. doi: 10.1096/fj.13-227330. Epub 2013 Aug 1. PMID: 23907436

[Chloride secretion across adult alveolar epithelial cells contributes to cardiogenic edema.](http://www.ncbi.nlm.nih.gov/pubmed/23720313)

Londino JD, Matalon S.

Proc Natl Acad Sci U S A. 2013 Jun 18;110(25):10055-6. doi: 10.1073/pnas.1307480110. Epub 2013 May 29. No abstract available. PMID: 23720313

[Chlorine induces the unfolded protein response in murine lungs and skin.](http://www.ncbi.nlm.nih.gov/pubmed/23668485)

Li C, Weng Z, Doran SF, Srivastava RK, Afaq F, Matalon S, Athar M.

Am J Respir Cell Mol Biol. 2013 Aug;49(2):197-203. doi: 10.1165/rcmb.2012-0488RC. PMID: 23668485

[Chlorine gas exposure increases susceptibility to invasive lung fungal infection.](http://www.ncbi.nlm.nih.gov/pubmed/23564508)

Gessner MA, Doran SF, Yu Z, Dunaway CW, Matalon S, Steele C.

Am J Physiol Lung Cell Mol Physiol. 2013 Jun 1;304(11):L765-73. doi: 10.1152/ajplung.00030.2013. Epub 2013 Apr 5. PMID: 23564508

[Influenza Matrix Protein 2 Alters CFTR Expression and Function through its Ion Channel Activity.](http://www.ncbi.nlm.nih.gov/pubmed/23457187)

Londino JD, Lazrak A, Jurkuvenaite A, Collawn JF, Noah JW, Matalon S.

Am J Physiol Lung Cell Mol Physiol. 2013 Mar 1. [Epub ahead of print] PMID: 23457187

[Titanium Oxide Nanoparticle Instillation Induces Inflammation and Inhibits Lung Development in Mice.](http://www.ncbi.nlm.nih.gov/pubmed/23220372)

Ambalavanan N, Stanishevsky A, Bulger A, Halloran BA, Steele C, Vohra Y, **Matalon S**.

Am J Physiol Lung Cell Mol Physiol. 2013 Feb;304(3):L152-61; PMID:23220372

[Real-time visualization of lung function: from micro to macro.](http://www.ncbi.nlm.nih.gov/pubmed/23064952)

Morty RE, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2013 Jan 1;304(1):L1-3; PMID:23064952

[δ ENaC: A Novel Divergent Amiloride-Inhibitable Sodium Channel.](http://www.ncbi.nlm.nih.gov/pubmed/22983350)

Ji HL, Zhao RZ, Chen ZX, Shetty S, Idell S, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2012 Dec 15;303(12):L1013-26; PMID:22983350

[Nano-TiO(2) particles impair adhesion of airway epithelial cells to fibronectin.](http://www.ncbi.nlm.nih.gov/pubmed/22947217)

Zarogiannis SG, Filippidis AS, Fernandez S, Jurkuvenaite A, Ambalavanan N, Stanishevsky A, Vohra YK, **Matalon S**. Respir Physiol Neurobiol. 2013 Jan 15;185(2):454-60; PMID:22947217

[Administration of nitrite after chlorine gas exposure prevents lung injury: effect of administration modality.](http://www.ncbi.nlm.nih.gov/pubmed/22917977)

Samal AA, Honavar J, Brandon A, Bradley KM, Doran S, Liu Y, Dunaway C, Steele C, Postlethwait EM, Squadrito GL, Fanucchi MV, **Matalon S**, Patel RP. (equal contributions as senior authors).

Free Radic Biol Med. 2012 Oct 1;53(7):1431-9. doi: 10.1016/j.freeradbiomed.2012.08.007. Epub 2012 Aug 11. PMID:22917977

[The role of CFTR in transepithelial liquid t*ransport in pig alveolar epithelia.*](http://www.ncbi.nlm.nih.gov/pubmed/22797251)

Collawn JF, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2012 Sep 15;303(6):L489-91. doi: 10.1152/ajplung.00216.2012. Epub 2012 Jul 13. No abstract available.

PMID:22797251

[Characterization of a novel splice variant of δ ENaC subunit in human lungs.](http://www.ncbi.nlm.nih.gov/pubmed/22505667)

Zhao RZ, Nie HG, Su XF, Han DY, Lee A, Huang Y, Chang Y, Matalon S, Ji HL. Am J Physiol Lung Cell Mol Physiol. 2012 Jun 15;302(12):L1262-72. doi: 10.1152/ajplung.00331.2011. Epub 2012 Apr 13. PMID:22505667

[The CFTR and ENaC debate: how important is ENaC in CF lung disease?](file:///C:\Documents%20and%20Settings\rphillips\My%20Documents\Matalon%20CV%20June%2015,%202012\Matalon%20Sadis%20March%202012.docx)

Collawn JF, Lazrak A, Bebok Z, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2012 Jun;302(11): L1141-6.Epub 2012 Apr 6. PMID:22492740

[Targeted Aerosolized Delivery of Ascorbate in the Lungs of Chlorine-Exposed Rats.](http://www.ncbi.nlm.nih.gov/pubmed/22393907)

Bracher A, Doran SF, Squadrito GL, Postlethwait EM, Bowen L, **Matalon S**.

J Aerosol Med Pulm Drug Deliv. 2012 Dec;25(6):333-41; PMID: 22393907

[Comparison of ribavirin and oseltamivir in reducing mortality and lung injury in mice infected with mouse adapted A/California/04/2009 (H1N1).](http://www.ncbi.nlm.nih.gov/pubmed/22269828)

Zarogiannis SG, Noah JW, Jurkuvenaite A, Steele C, **Matalon S**, Noah DL.

Life Sci. 2012 Mar 10;90(11-12):440-5. Epub 2012 Jan 16. PMID: 22269828

[Assessment of locomotion in chlorine exposed mice by computer vision and neural networks.](http://www.ncbi.nlm.nih.gov/pubmed/22207722)

Filippidis AS, Zarogiannis SG, Randich A, Ness TJ, **Matalon S**.

J Appl Physiol. 2012 Mar;112(6):1064-72. Epub 2011 Dec 29.

PMID: 22207722

[Participation of miR-200 in pulmonary fibrosis.](http://www.ncbi.nlm.nih.gov/pubmed/22189082)

Yang S, Banerjee S, de Freitas A, Sanders YY, Ding Q, **Matalon S**, Thannickal VJ, Abraham E, Liu G.

Am J Pathol. 2012 Feb;180(2):484-93. Epub 2011 Dec 20. PMID: 22189082

[Post-exposure Antioxidant Treatment Decreases Airway Hyperplasia and Hyperreactivity Due to Chlorine Inhalation in Rats.](http://www.ncbi.nlm.nih.gov/pubmed/22162906)

Fanucchi MV, Bracher A, Doran SF, Squadrito GL, Fernandez S, Postlethwait EM, Bowen L, **Matalon S**. Am J Respir Cell Mol Biol. 2012 May;46(5):599-606; PMID: 22162906

[Constrictive bronchiolitis in soldiers.](http://www.ncbi.nlm.nih.gov/pubmed/22047574)

Zarogiannis SG, **Matalon S**.

N Engl J Med. 2011 Nov 3;365(18):1743; author reply 1744-5. No abstract available.

PMID: 22047574

[Regulation of Alveolar Epithelial Na+ Channels by ERK1/2 in Chlorine-Breathing Mice.](http://www.ncbi.nlm.nih.gov/pubmed/21997487)

Lazrak A, Chen L, Jurkuvenaite A, Doran SF, Liu G, Li Q, Lancaster JR Jr, **Matalon S**.

Am J Respir Cell Mol Biol. 2012 Mar;46(3):342-54. Epub 2011 Oct 13.

PMID: 21997487

[Enhancement of alveolar epithelial sodium channel activity with decreased cystic fibrosis transmembrane conductance regulator expression in mouse lung.](http://www.ncbi.nlm.nih.gov/pubmed/21743028)

Lazrak A, Jurkuvenaite A, Chen L, Keeling KM, Collawn JF, Bedwell DM, **Matalon S**.

Am J Physiol Lung Cell Mol Physiol. 2011 Oct;301(4):L557-67. Epub 2011 Jul 8.

PMID:21743028

[Dale J. Benos, Ph.D. (1950-2010).](http://www.ncbi.nlm.nih.gov/pubmed/21296896)

**Matalon S**, Eaton DC.

Am J Physiol Lung Cell Mol Physiol. 2011 Apr;300(4):L509-11. Epub 2011 Feb 4. No abstract available.

PMID:21296896

[Mitigation of chlorine gas lung injury in rats by postexposure administration of sodium nitrite.](http://www.ncbi.nlm.nih.gov/pubmed/21148791)

Yadav AK, Doran SF, Samal AA, Sharma R, Vedagiri K, Postlethwait EM, Squadrito GL, Fanucchi MV, Roberts LJ 2nd, Patel RP, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2011 Mar;300(3):L362-9. Epub 2010 Dec 10. PMID: 21148791

[Chlorine gas exposure causes systemic endothelial dysfunction by inhibiting endothelial nitric oxide synthase-dependent signaling.](http://www.ncbi.nlm.nih.gov/pubmed/21131444)

Honavar J, Samal AA, Bradley KM, Brandon A, Balanay J, Squadrito GL, Mohankumar K, Maheshwari A, Postlethwait EM, **Matalon S**, Patel RP. Am J Respir Cell Mol Biol. 2011 Aug;45(2):419-25. Epub 2010 Dec 3.

[Ascorbate and deferoxamine administration after chlorine exposure decrease mortality and lung injury in mice.](http://www.ncbi.nlm.nih.gov/pubmed/21131440)

Zarogiannis SG, Jurkuvenaite A, Fernandez S, Doran SF, Yadav AK, Squadrito GL, Postlethwait EM, Bowen L, **Matalon S**. Am J Respir Cell Mol Biol. 2011 Aug;45(2):386-92. Epub 2010 Dec 3.

[Postexposure Administration of a {beta}2-Agonist Decreases Chlorine-Induced Airway Hyperreactivity in Mice.](http://www.ncbi.nlm.nih.gov/pubmed/20855648)

Song W, Wei S, Liu G, Yu Z, Estell K, Yadav AK, Schwiebert LM, **Matalon S**.

Am J Respir Cell Mol Biol. 2011 Jul;45(1):88-94. Epub 2010 Sep 20.

[Inhibition of epithelial sodium channels by respiratory syncytial virus in vitro and in vivo.](http://www.ncbi.nlm.nih.gov/pubmed/20716287)

Song W, Wei S, **Matalon S**. Ann N Y Acad Sci. 2010 Aug;1203:79-84. Review.PMID: 20716287

[Mechanisms and modification of chlorine-induced lung injury in animals.](http://www.ncbi.nlm.nih.gov/pubmed/20601632)

Yadav AK, Bracher A, Doran SF, Leustik M, Squadrito GL, Postlethwait EM, **Matalon S**. Proc Am Thorac Soc. 2010 Jul;7(4):278-83. Review.PMID: 20601632

[Exposing animals to oxidant gases: nose only vs. whole body.](http://www.ncbi.nlm.nih.gov/pubmed/20601630) Cheng YS, Bowen L, Rando RJ, Postlethwait EM, Squadrito GL, **Matalon S**. Proc Am Thorac Soc. 2010 Jul;7(4):264-8.PMID: 20601630

[Understanding and treating chlorine-induced lung injury.](http://www.ncbi.nlm.nih.gov/pubmed/20601627) **Matalon S**, Maull EA. Proc Am Thorac Soc. 2010 Jul;7(4):253. PMID: 20601627

[Elucidating mechanisms of chlorine toxicity: reaction kinetics, thermodynamics, and physiological implications.](http://www.ncbi.nlm.nih.gov/pubmed/20525917)

Squadrito GL, Postlethwait EM, **Matalon S**.

Am J Physiol Lung Cell Mol Physiol. 2010 Sep;299(3):L289-300. Epub 2010 Jun 4. Review.

[Effects of alpha 1-antitrypsin on endotoxin-induced lung inflammation in vivo.](http://www.ncbi.nlm.nih.gov/pubmed/20238140) Subramaniyam D, Steele C, Köhnlein T, Welte T, Grip O, **Matalon S**, Janciauskiene S. Inflamm Res. 2010 Jul;59(7):571-8. Epub 2010 Mar 18. PMID: 20238140

[Myeloperoxidase-dependent inactivation of surfactant protein D in vitro and in vivo.](http://www.ncbi.nlm.nih.gov/pubmed/20228064) Crouch EC, Hirche TO, Shao B, Boxio R, Wartelle J, Benabid R, McDonald B, Heinecke J, **Matalon S,** Belaaouaj A. J Biol Chem. 2010 May 28;285(22):16757-70 PMID: 20228064

[Inhibition of lung fluid clearance and epithelial Na+ channels by chlorine, hypochlorous acid and chloramines.](http://www.ncbi.nlm.nih.gov/pubmed/20106988) Song W, Wei S, Shou Y, Lazrak A, Liu G, Londino JD, Squadrito GL, **Matalon S.** J Biol Chem. 2010 Mar 26;285(13):9716-28. Epub 2010 Jan 27.PMID: 20106988 [PubMed - indexed for MEDLINE]

[Reactive species and pulmonary edema.](http://www.ncbi.nlm.nih.gov/pubmed/20305724) Iles KE, Song W, Miller DW, Dickinson DA, **Matalon S**.

Expert Rev Respir Med. 2009 Oct 1;3(5):487-496.PMID: 20305724

[Influenza virus M2 protein inhibits epithelial sodium channels by increasing reactive oxygen species.](http://www.ncbi.nlm.nih.gov/pubmed/19596899?itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum&ordinalpos=5)

Lazrak A, Iles KE, Liu G, Noah DL, Noah JW, **Matalon S**. FASEB J. 2009 Nov;23(11):3829-42. Epub 2009 Jul 13.PMID: 19596899

**(see editorial by FASEB J on this article:** “Scientists discover influenza's Achilles heel: Antioxidants”  
[[View Release](http://www.eurekalert.org/pub_releases/2009-10/foas-sdi102909.php)]

[Functional stability of rescued delta F508 cystic fibrosis transmembrane conductance regulator in airway epithelial cells.](http://www.ncbi.nlm.nih.gov/pubmed/19502384) Jurkuvenaite A, Chen L, Bartoszewski R, Goldstein R, Bebok Z, **Matalon S,** Collawn JF. Am J Respir Cell Mol Biol. 2010 Mar;42(3):363-72. Epub 2009 Jun 5. PMID: 19502384

[Influenza Exerts Continued Pressure in an Era of Modern Medicine.](http://www.ncbi.nlm.nih.gov/pubmed/19423770?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Noah JW, Noah DL, **Matalon S**.

Am J Respir Cell Mol Biol. 2009 Jul;41(1):3-7. Epub 2009 May 7. PMID: 19423770

[Regulation of epithelial sodium channels by cGMP/PKGII.](http://www.ncbi.nlm.nih.gov/pubmed/19359370?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Nie HG, Chen L, Han DY, Li J, Song WF, Wei SP, Fang XH, Gu X, **Matalon S**, Ji HL. J Physiol. 2009 Jun 1;587(Pt 11):2663-76. Epub 2009 Apr 9.PMID: 19359370

[Search and rescue: finding ways to correct DeltaF508 CFTR.](http://www.ncbi.nlm.nih.gov/pubmed/19293344?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Collawn JF, Bebok Z, **Matalon S.**

Am J Respir Cell Mol Biol. 2009 Apr;40(4):385-7. PMID: 19293344

[Regulation of nitrite transport in red blood cells by hemoglobin oxygen fractional saturation.](http://www.ncbi.nlm.nih.gov/pubmed/19286940?itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum&ordinalpos=14)

Vitturi DA, Teng X, Toledo JC, **Matalon S**, Lancaster JR Jr, Patel RP. Am J Physiol Heart Circ Physiol. 2009 May;296(5):H1398-407. Epub 2009 Mar 13.PMID: 19286940

Effect of Phosphate Salts Concentrations, Supporting Electrolytes, and Calcium Phosphate Salt Precipitation on the pH of Phosphate Buffer Solutions Yoonjee Park, Sook Heun Kim, **Sadis Matalon**, Nien-Hwa Linda Wangand Elias I. Franses, Fluid Phase Equilibria.278 (2009) 76-84

[Alpha1-Antitrypsin Inhibits Epithelial Na+ Transport in vitro and in vivo.](http://www.ncbi.nlm.nih.gov/pubmed/19131639?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Lazrak A, Nita I, Subramaniyam D, Wei S, Song W, Ji HL, Janciauskiene S, **Matalon S.** Am J Respir Cell Mol Biol. 2009 Sep;41(3):261-70. Epub 2009 Jan 8.PMID: 19131639

[Respiratory Syncytial Virus Inhibits Lung Epithelial Na+ Channels by Up-regulating Inducible Nitric-oxide Synthase.](http://www.ncbi.nlm.nih.gov/pubmed/19131335?ordinalpos=5&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Song W, Liu G, Bosworth CA, Walker JR, Megaw GA, Lazrak A, Abraham E, Sullender WM, **Matalon S.** J Biol Chem. 2009 Mar 13;284(11):7294-306. Epub 2009 Jan 8. PMID: 19131335

[Modification of surfactant protein D by reactive oxygen-nitrogen intermediates is accompanied by loss of aggregating activity, in vitro and in vivo.](http://www.ncbi.nlm.nih.gov/pubmed/19126597?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Shrestha K, Kirk M, Waldheuser S, McDonald B, Smith K, Gao Z, Belaaouaj A, Crouch EC. FASEB J. 2009 May;23(5):1415-30. Epub 2009 Jan 6.PMID: 19126597

[SARS-CoV Proteins Decrease Levels and Activity of Human ENaC via Activation of Distinct PKC Isoforms.](http://www.ncbi.nlm.nih.gov/pubmed/19112100?ordinalpos=2&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Ji HL, Song W, Gao Z, Su XF, Nie HG, Jiang Y, Peng JB, He YX, Liao Y, Zhou YJ, Tousson A, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2009 Mar;296(3):L372-83. Epub 2008 Dec 26.PMID: 19112100

[Inhibition of Na+ Transport in Lung Epithelial Cells by Respiratory Syncytial Virus Infection.](http://www.ncbi.nlm.nih.gov/pubmed/18952569?ordinalpos=5&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Chen L, Song W, Davis IC, Shrestha K, Schwiebert E, Sullender WM, **Matalon S**. Chen L, Song W, Davis IC, Shrestha K, Schwiebert E, Sullender WM, Matalon S. Am J Respir Cell Mol Biol. 2009 May;40(5):588-600. Epub 2008 Oct 23.PMID: 18952569

[Effect of buffer composition and preparation protocol on the dispersion stability and interfacial behavior of aqueous DPPC dispersions.](http://www.ncbi.nlm.nih.gov/pubmed/18930639?ordinalpos=6&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Kim SH, Park Y, **Matalon S**, Franses EI. Colloids Surf B Biointerfaces. 2008 Dec 1;67(2):253-60. Epub 2008 Sep 16. PMID: 18930639 [PubMed - in process]

[Alpha1-antitrypsin inhibits the activity of the matriptase catalytic domain in vitro.](http://www.ncbi.nlm.nih.gov/pubmed/18723439?ordinalpos=3&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Janciauskiene S, Nita I, Subramaniyam D, Li Q, Lancaster JR Jr, **Matalon S**. Am J Respir Cell Mol Biol. 2008 Dec;39(6):631-7. Epub 2008 Aug 21. PMID: 18723439

[Mitigation of chlorine-induced lung injury by low-molecular-weight antioxidants.](http://www.ncbi.nlm.nih.gov/pubmed/18708632?ordinalpos=10&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Leustik M, Doran S, Bracher A, Williams S, Squadrito GL, Schoeb TR, Postlethwait E, **Matalon S.**

Am J Physiol Lung Cell Mol Physiol. 2008 Nov;295(5):L733-43. Epub 2008 Aug 15.PMID: 18708632

[DETANO and nitrated lipids increase chloride secretion across lung airway cells.](http://www.ncbi.nlm.nih.gov/pubmed/18314534?ordinalpos=12&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Chen L, Bosworth CA, Pico T, Collawn JF, Varga K, Gao Z, Clancy JP, Fortenberry JA, Lancaster JR Jr, **Matalon S.** Am J Respir Cell Mol Biol. 2008 Aug;39(2):150-62. Epub 2008 Feb 28.PMID: 18314534

[Epithelial sodium channels in the adult lung--important modulators of pulmonary health and disease.](http://www.ncbi.nlm.nih.gov/pubmed/18269193?ordinalpos=13&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Davis IC, **Matalon S**. Adv Exp Med Biol. 2007;618:127-40. Review. PMID: 18269193

[Genomics and proteomics of lung disease: conference summary.](file:///C:\Documents%20and%20Settings\rphillips\My%20Documents\Matalon%20CV%20June%2015,%202012\Matalon%20Sadis%20March%202012.docx)

J. Usha Raj, Constantin Aliferis, Richard M. Caprioli, Allen W. Cowley, Jr., Peter F. Davies, Mark W. Duncan, David J. Erle, Serpil C. Erzurum, Patricia W. Finn, Harry Ischiropoulos, Naftali Kaminski, Steven R. Kleeberger, George D. Leikauf, James E. Loyd, Thomas R. Martin, Sadis Matalon, Jason H. Moore, John Quackenbush, Tara Sabo-Attwood, Steve D. Shapiro, Jan E. Schnitzer, David A. Schwartz, Lisa M. Schwiebert, Dean Sheppard, Lorraine B. Ware, Scott T. Weiss, Jeff A. Whitsett, Mark M. Wurfel, and Michael A. Matthay

Am J Physiol Lung Cell Mol Physiol July 2007 293:(1) L45-L51; published ahead of print April 27, 2007, doi:10.1152/ajplung.00139.2007

PMID:17468134[PubMed – indexed for MEDLINE]

[Enhanced cell-surface stability of rescued DeltaF508 cystic fibrosis transmembrane conductance regulator (CFTR) by pharmacological chaperones.](http://www.ncbi.nlm.nih.gov/pubmed/18052931?ordinalpos=14&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Varga K, Goldstein RF, Jurkuvenaite A, Chen L, **Matalon S**, Sorscher EJ, Bebok Z, Collawn JF. Biochem J. 2008 Mar 15;410(3):555-64.

PMID: 18052931

[Modulation of alveolar fluid clearance by reactive oxygen-nitrogen intermediates.](http://www.ncbi.nlm.nih.gov/pubmed/17693483?ordinalpos=17&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Song W, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2007 Oct;293(4):L855-8. Epub 2007 Aug 10. Review. No abstract available. PMID: 17693483

[Post-infection A77-1726 blocks pathophysiologic sequelae of respiratory syncytial virus infection.](http://www.ncbi.nlm.nih.gov/pubmed/17541010?ordinalpos=21&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Davis IC, Lazarowski ER, Chen FP, Hickman-Davis JM, Sullender WM, **Matalon S**.

Am J Respir Cell Mol Biol. 2007 Oct;37(4):379-86. Epub 2007 May 31. PMID: 17541010

[Respiratory syncytial virus induces insensitivity to beta-adrenergic agonists in mouse lung epithelium in vivo.](http://www.ncbi.nlm.nih.gov/pubmed/17435077?ordinalpos=23&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Davis IC, Xu A, Gao Z, Hickman-Davis JM, Factor P, Sullender WM, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2007 Aug;293(2):L281-9. Epub 2007 Apr 13. PMID: 17435077

[Adenosine regulation of alveolar fluid clearance.](http://www.ncbi.nlm.nih.gov/pubmed/17360481?ordinalpos=24&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Factor P, Mutlu GM, Chen L, Mohameed J, Akhmedov AT, Meng FJ, Jilling T, Lewis ER, Johnson MD, Xu A, Kass D, Martino JM, Bellmeyer A, Albazi JS, Emala C, Lee HT, Dobbs LG, **Matalon S**. Proc Natl Acad Sci U S A. 2007 Mar 6;104(10):4083-8. Epub 2007 Feb 28. PMID: 17360481

[Interregulation of proton-gated Na(+) channel 3 and cystic fibrosis transmembrane conductance regulator.](http://www.ncbi.nlm.nih.gov/pubmed/17012229?ordinalpos=29&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Su X, Li Q, Shrestha K, Cormet-Boyaka E, Chen L, Smith PR, Sorscher EJ, Benos DJ, **Matalon S**, Ji HL. J Biol Chem. 2006 Dec 1;281(48):36960-8. Epub 2006 Sep 29. PMID: 17012229

[Surfactant dysfunction in SP-A-/- and iNOS-/- mice with mycoplasma infection.](http://www.ncbi.nlm.nih.gov/pubmed/16917077?ordinalpos=30&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Hickman-Davis JM, Wang Z, Fierro-Perez GA, Chess PR, Page GP, **Matalon S**, Notter RH.

Am J Respir Cell Mol Biol. 2007 Jan;36(1):103-13. Epub 2006 Aug 17. PMID: 16917077

[Upregulation of immunoproteasomes by nitric oxide: potential antioxidative mechanism in endothelial cells.](http://www.ncbi.nlm.nih.gov/pubmed/16540399?ordinalpos=32&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Kotamraju S, **Matalon S**, Matsunaga T, Shang T, Hickman-Davis JM, Kalyanaraman B. Free Radic Biol Med. 2006 Mar 15;40(6):1034-44. Epub 2005 Nov 17. PMID: 16540399

[Bactericidal function of alveolar macrophages in mechanically ventilated rabbits.](http://www.ncbi.nlm.nih.gov/pubmed/16474095?ordinalpos=35&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Hall NG, Liu Y, Hickman-Davis JM, Davis GC, Myles C, Andrews EJ**, Matalon S**, Lang JD Jr.

Am J Respir Cell Mol Biol. 2006 Jun;34(6):719-26. Epub 2006 Feb 10. PMID: 16474095

[Delta-subunit confers novel biophysical features to alpha beta gamma-human epithelial sodium channel (ENaC) via a physical interaction.](http://www.ncbi.nlm.nih.gov/pubmed/16423824?ordinalpos=36&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Ji HL, Su XF, Kedar S, Li J, Barbry P, Smith PR, **Matalon S**, Benos DJ. J Biol Chem. 2006 Mar 24;281(12):8233-41. Epub 2006 Jan 19. PMID: 16423824

[Mechanisms of cystic fibrosis transmembrane conductance regulator activation by S-nitrosoglutathione.](http://www.ncbi.nlm.nih.gov/pubmed/16421103?ordinalpos=37&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Chen L, Patel RP, Teng X, Bosworth CA, Lancaster JR Jr, **Matalon S**.

J Biol Chem. 2006 Apr 7;281(14):9190-9. Epub 2006 Jan 17. PMID: 16421103

[Leflunomide prevents alveolar fluid clearance inhibition by respiratory syncytial virus.](http://www.ncbi.nlm.nih.gov/pubmed/16387801?ordinalpos=38&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Davis IC, Lazarowski ER, Hickman-Davis JM, Fortenberry JA, Chen FP, Zhao X, Sorscher E, Graves LM, Sullender WM, **Matalon S**. Am J Respir Crit Care Med. 2006 Mar 15;173(6):673-82. Epub 2005 Dec 30. PMID: 16387801

[Reactive species mediate inhibition of alveolar type II sodium transport during mycoplasma infection.](http://www.ncbi.nlm.nih.gov/pubmed/16254273?ordinalpos=39&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Hickman-Davis JM, McNicholas-Bevensee C, Davis IC, Ma HP, Davis GC, Bosworth CA, **Matalon S**. Am J Respir Crit Care Med. 2006 Feb 1;173(3):334-44. Epub 2005 Oct 27. PMID: 16254273

[Thrombin increases lung water by decreasing Na,K-ATPase activity.](http://www.ncbi.nlm.nih.gov/pubmed/16172251?ordinalpos=40&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Rennard SI. Am J Respir Cell Mol Biol. 2005 Oct;33(4):317-8. No abstract available. PMID: 16172251

[Regulation of Na+ channels in lung alveolar type II epithelial cells.](http://www.ncbi.nlm.nih.gov/pubmed/16113405?ordinalpos=41&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Eaton DC, Chen J, Ramosevac S, **Matalon S**, Jain L. Proc Am Thorac Soc. 2004;1(1):10-6. Review. PMID: 16113405

[Oleic acid damages ion transport and promotes alveolar edema: the dark side of healthy living.](http://www.ncbi.nlm.nih.gov/pubmed/15722419?ordinalpos=44&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Ji HL. Am J Respir Crit Care Med. 2005 Mar 1;171(5):424-5. No abstract available. PMID: 15722419

[Apical trypsin increases ion transport and resistance by a phospholipase C-dependent rise of Ca2+.](http://www.ncbi.nlm.nih.gov/pubmed/15626748?ordinalpos=46&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Swystun V, Chen L, Factor P, Siroky B, Bell PD**, Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2005 May;288(5):L820-30. Epub 2004 Dec 30. PMID: 15626748

[Surfactant proteins and inflammation: the yin and the yang.](http://www.ncbi.nlm.nih.gov/pubmed/15550564?ordinalpos=47&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Wright JR. Am J Respir Cell Mol Biol. 2004 Dec;31(6):585-6. No abstract available. PMID: 15550564

[Lipopolysaccharide increases alveolar type II cell number in fetal mouse lungs through Toll-like receptor 4 and NF-kappaB.](http://www.ncbi.nlm.nih.gov/pubmed/15475494?ordinalpos=48&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Prince LS, Okoh VO, Moninger TO, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2004 Nov;287(5):L999-1006. PMID: 15475494

[Upregulation of alveolar epithelial active Na+ transport is dependent on beta2-adrenergic receptor signaling.](http://www.ncbi.nlm.nih.gov/pubmed/15016730?ordinalpos=52&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Mutlu GM, Dumasius V, Burhop J, McShane PJ, Meng FJ, Welch L, Dumasius A, Mohebahmadi N, Thakuria G, Hardiman K, **Matalon S**, Hollenberg S, Factor P. Circ Res. 2004 Apr 30;94(8):1091-100. Epub 2004 Mar 11. PMID: 15016730

[Mutations in the extracellular loop of alpha-rENaC alter sensitivity to amiloride and reactive species.](http://www.ncbi.nlm.nih.gov/pubmed/14969999?ordinalpos=53&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Chen L, Fuller CM, Kleyman TR, **Matalon S**. Am J Physiol Renal Physiol. 2004 Jun;286(6):F1202-8. Epub 2004 Feb 17. PMID: 14969999

[Regulation of amiloride-sensitive Na(+) transport by basal nitric oxide.](http://www.ncbi.nlm.nih.gov/pubmed/14607816?ordinalpos=55&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Hardiman KM, McNicholas-Bevensee CM, Fortenberry J, Myles CT, Malik B, Eaton DC, **Matalon S.**

Am J Respir Cell Mol Biol. 2004 May;30(5):720-8. Epub 2003 Nov 7. PMID: 14607816

[Regulation of ion channel structure and function by reactive oxygen-nitrogen species.](http://www.ncbi.nlm.nih.gov/pubmed/14604848?ordinalpos=56&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

**Matalon S**, Hardiman KM, Jain L, Eaton DC, Kotlikoff M, Eu JP, Sun J, Meissner G, Stamler JS.

Am J Physiol Lung Cell Mol Physiol. 2003 Dec;285(6):L1184-9. Review. PMID: 14604848

[Role of surfactant protein-A in nitric oxide production and mycoplasma killing in congenic C57BL/6 mice.](http://www.ncbi.nlm.nih.gov/pubmed/12959946?ordinalpos=58&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Hickman-Davis JM, Gibbs-Erwin J, Lindsey JR, **Matalon S**. Am J Respir Cell Mol Biol. 2004 Mar;30(3):319-25. Epub 2003 Sep 4. PMID: 12959946

[Novel SIN-1 reactive intermediates modulate chloride secretion across murine airway cells.](http://www.ncbi.nlm.nih.gov/pubmed/12957658?ordinalpos=59&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Thome U, Lazrak A, Chen L, Kirk MC, Thomas MJ, Forman HJ, **Matalon S.** Free Radic Biol Med. 2003 Sep 15;35(6):662-75. PMID: 12957658

[Nucleotide-mediated inhibition of alveolar fluid clearance in BALB/c mice after respiratory syncytial virus infection.](http://www.ncbi.nlm.nih.gov/pubmed/12948936?ordinalpos=60&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Davis IC, Sullender WM, Hickman-Davis JM, Lindsey JR, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2004 Jan;286(1):L112-20. Epub 2003 Aug 29. PMID: 12948936

[cAMP-induced changes of apical membrane potentials of confluent H441 monolayers.](http://www.ncbi.nlm.nih.gov/pubmed/12704021?ordinalpos=65&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Lazrak A, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2003 Aug;285(2):L443-50. Epub 2003 Apr 18.PMID: 12704021

[Future research directions in acute lung injury: summary of a National Heart, Lung, and Blood Institute working group.](http://www.ncbi.nlm.nih.gov/pubmed/12663342?ordinalpos=66&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Matthay MA, Zimmerman GA, Esmon C, Bhattacharya J, Coller B, Doerschuk CM, Floros J, Gimbrone MA Jr, Hoffman E, Hubmayr RD, Leppert M, **Matalon S**, Munford R, Parsons P, Slutsky AS, Tracey KJ, Ward P, Gail DB, Harabin AL. Am J Respir Crit Care Med. 2003 Apr 1;167(7):1027-35. Review. PMID: 12663342

[Hyperoxia impairs antibacterial function of macrophages through effects on actin.](http://www.ncbi.nlm.nih.gov/pubmed/12654633?ordinalpos=67&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

O'Reilly PJ, Hickman-Davis JM, Davis IC, **Matalon S**. Am J Respir Cell Mol Biol. 2003 Apr;28(4):443-50. PMID: 12654633

[Vectorial sodium transport across the mammalian alveolar epithelium: it occurs but through which cells?](http://www.ncbi.nlm.nih.gov/pubmed/12623872?ordinalpos=69&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Davis IC. Circ Res. 2003 Mar 7;92(4):348-9. No abstract available. PMID: 12623872

[Modulation of sodium transport in fetal alveolar epithelial cells by oxygen and corticosterone.](http://www.ncbi.nlm.nih.gov/pubmed/12533313?ordinalpos=70&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Thome UH, Davis IC, Nguyen SV, Shelton BJ, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2003 Feb;284(2):L376-85. Epub 2002 Nov 15. PMID: 12533313

[Inhibition of human surfactant protein A function by oxidation intermediates of nitrite.](http://www.ncbi.nlm.nih.gov/pubmed/12488138?ordinalpos=72&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)Davis IC, Zhu S, Sampson JB, Crow JP, **Matalon S**. Free Radic Biol Med. 2002 Dec 15;33(12):1703-13.

PMID: 12488138

[Oxidant-antioxidant balance in acute lung injury.](http://www.ncbi.nlm.nih.gov/pubmed/12475808?ordinalpos=73&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Lang JD, McArdle PJ, O'Reilly PJ, **Matalon S**. Chest. 2002 Dec;122(6 Suppl):314S-320S. Review. PMID: 12475808

[Invited review: biophysical properties of sodium channels in lung alveolar epithelial cells.](http://www.ncbi.nlm.nih.gov/pubmed/12381774?ordinalpos=74&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

**Matalon S**, Lazrak A, Jain L, Eaton DC. J Appl Physiol. 2002 Nov;93(5):1852-9. Review. PMID: 12381774

[Alveolar macrophage activation after trauma-hemorrhage and sepsis is dependent on NF-kappaB and MAPK/ERK mechanisms.](http://www.ncbi.nlm.nih.gov/pubmed/12225957?ordinalpos=75&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Jarrar D, Kuebler JF, Rue LW 3rd, **Matalon S**, Wang P, Bland KI, Chaudry IH. Am J Physiol Lung Cell Mol Physiol. 2002 Oct;283(4):L799-805. PMID: 12225957

[Reactive oxygen nitrogen species decrease cystic fibrosis transmembrane conductance regulator expression and cAMP-mediated Cl- secretion in airway epithelia.](http://www.ncbi.nlm.nih.gov/pubmed/12194970?ordinalpos=76&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Bebok Z, Varga K, Hicks JK, Venglarik CJ, Kovacs T, Chen L, Hardiman KM, Collawn JF, Sorscher EJ, **Matalon S.** J Biol Chem. 2002 Nov 8;277(45):43041-9. Epub 2002 Aug 22. PMID: 12194970

[The role of nitric oxide in lung innate immunity: modulation by surfactant protein-A.](http://www.ncbi.nlm.nih.gov/pubmed/12162458?ordinalpos=77&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) O'Reilly P, Hickman-Davis JM, McArdle P, Young KR, **Matalon S.** Mol Cell Biochem. 2002 May-Jun;234-235(1-2):39-48. PMID: 12162458

[Elevated generation of reactive oxygen/nitrogen species in hantavirus cardiopulmonary syndrome.](http://www.ncbi.nlm.nih.gov/pubmed/12134039?ordinalpos=78&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Davis IC, Zajac AJ, Nolte KB, Botten J, Hjelle B, **Matalon S.** J Virol. 2002 Aug;76(16):8347-59.

PMID: 12134039

[Effects of variable concentrations of inhaled nitric oxide and oxygen on the lungs of newborn piglets.](http://www.ncbi.nlm.nih.gov/pubmed/12112799?ordinalpos=79&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Levine CR, Kazzaz JA, Koo HC, Chester D, Merritt TA, **Matalon S**, Pollack S, Davis JM. Pediatr Pulmonol. 2002 Jul;34(1):58-65. PMID: 12112799

[Killing of Klebsiella pneumoniae by human alveolar macrophages.](http://www.ncbi.nlm.nih.gov/pubmed/11943658?ordinalpos=80&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Hickman-Davis JM, O'Reilly P, Davis IC, Peti-Peterdi J, Davis G, Young KR, Devlin RB, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2002 May;282(5):L944-56. PMID: 11943658

[Enhancement of adenovirus-mediated gene transfer in lungs and epithelial cells by EGTA.](http://www.ncbi.nlm.nih.gov/pubmed/11893677?ordinalpos=82&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Myles C, Sorscher E, **Matalon S**. Chest. 2002 Mar;121(3 Suppl):35S. No abstract available. PMID: 11893677

[cAMP regulation of Cl(-) and HCO(-)(3) secretion across rat fetal distal lung epithelial cells.](http://www.ncbi.nlm.nih.gov/pubmed/11880289?ordinalpos=83&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Lazrak A, Thome U, Myles C, Ware J, Chen L, Venglarik CJ, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2002 Apr;282(4):L650-8. PMID: 11880289

[Modification of sodium transport and alveolar fluid clearance by hypoxia: mechanisms and physiological implications.](http://www.ncbi.nlm.nih.gov/pubmed/11713094?ordinalpos=84&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Hardiman KM, **Matalon S**. Am J Respir Cell Mol Biol. 2001 Nov;25(5):538-41. Review. No abstract available. PMID: 11713094

[Chlorzoxazone or 1-EBIO increases Na(+) absorption across cystic fibrosis airway epithelial cells.](http://www.ncbi.nlm.nih.gov/pubmed/11597903?ordinalpos=85&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Gao L, Yankaskas JR, Fuller CM, Sorscher EJ, **Matalon S**, Forman HJ, Venglarik CJ. Am J Physiol Lung Cell Mol Physiol. 2001 Nov;281(5):L1123-9. PMID: 11597903

[Cyclophosphamide decreases nitrotyrosine formation and inhibits nitric oxide production by alveolar macrophages in mycoplasmosis.](http://www.ncbi.nlm.nih.gov/pubmed/11553584?ordinalpos=86&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Hickman-Davis JM, Lindsey JR, **Matalon S**. Infect Immun. 2001 Oct;69(10):6401-10. PMID: 11553584

[Lack of amiloride-sensitive transport across alveolar and respiratory epithelium of iNOS(-/-) mice in vivo.](http://www.ncbi.nlm.nih.gov/pubmed/11504701?ordinalpos=87&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Hardiman KM, Lindsey JR, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2001 Sep;281(3):L722-31. PMID: 11504701

[Reactive species in viral pneumonitis: lessons from animal models.](http://www.ncbi.nlm.nih.gov/pubmed/11479370?ordinalpos=88&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Davis I, **Matalon S**. News Physiol Sci. 2001 Aug;16:185-90. Review. PMID: 11479370

[Mechanisms of TNF-alpha stimulation of amiloride-sensitive sodium transport across alveolar epithelium.](http://www.ncbi.nlm.nih.gov/pubmed/11350806?ordinalpos=89&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Fukuda N, Jayr C, Lazrak A, Wang Y, Lucas R, **Matalon S**, Matthay MA.Am J Physiol Lung Cell Mol Physiol. 2001 Jun;280(6):L1258-65. PMID: 11350806

[Na,K-ATPase gene transfer mitigates an oxidant-induced decrease of active sodium transport in rat fetal ATII cells.](http://www.ncbi.nlm.nih.gov/pubmed/11245623?ordinalpos=90&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Thome U, Chen L, Factor P, Dumasius V, Freeman B, Sznajder JI, **Matalon S.**

Am J Respir Cell Mol Biol. 2001 Mar;24(3):245-52. PMID: 11245623

[Increased levels of nitrate and surfactant protein a nitration in the pulmonary edema fluid of patients with acute lung injury.](http://www.ncbi.nlm.nih.gov/pubmed/11208643?ordinalpos=92&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Zhu S, Ware LB, Geiser T, Matthay MA, **Matalon S**. Am J Respir Crit Care Med. 2001 Jan;163(1):166-72.PMID: 11208643

[Nitric oxide and nitrotyrosine in the lungs of patients with acute respiratory distress syndrome.](http://www.ncbi.nlm.nih.gov/pubmed/11179131?ordinalpos=93&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Sittipunt C, Steinberg KP, Ruzinski JT, Myles C, Zhu S, Goodman RB, Hudson LD, **Matalon S**, Martin TR. Am J Respir Crit Care Med. 2001 Feb;163(2):503-10. PMID: 11179131

[Guanylyl cyclase stimulatory coupling to K(Ca) channels.](http://www.ncbi.nlm.nih.gov/pubmed/11078709?ordinalpos=94&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Nara M, Dhulipala PD, Ji GJ, Kamasani UR, Wang YX, **Matalon S**, Kotlikoff MI. Am J Physiol Cell Physiol. 2000 Dec;279(6):C1938-45. PMID: 11078709

[Cyclophosphamide prevents systemic keratinocyte growth factor-induced up-regulation of surfactant protein A after allogeneic transplant in mice.](http://www.ncbi.nlm.nih.gov/pubmed/11069830?ordinalpos=95&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Yang S, Panoskaltsis-Mortari A, Ingbar DH, **Matalon S**, Zhu S, Resnik ER, Farrell CL, Lacey DL, Blazar BR, Haddad IY. Am J Respir Crit Care Med. 2000 Nov;162(5):1884-90. PMID: 11069830

[Modification of biophysical properties of lung epithelial Na(+) channels by dexamethasone.](http://www.ncbi.nlm.nih.gov/pubmed/10942727?ordinalpos=96&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Lazrak A, Samanta A, Venetsanou K, Barbry P, **Matalon S**. Am J Physiol Cell Physiol. 2000 Sep;279(3):C762-70. PMID: 10942727

[Protein nitration, metabolites of reactive nitrogen species, and inflammation in lung allografts.](http://www.ncbi.nlm.nih.gov/pubmed/10852785?ordinalpos=97&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

De Andrade JA, Crow JP, Viera L, Bruce Alexander C, Randall Young K, McGiffin DC, Zorn GL, Zhu S, **Matalon S**, Jackson RM. Am J Respir Crit Care Med. 2000 Jun;161(6):2035-42. PMID: 10852785

[Halothane does not decrease amiloride-sensitive alveolar fluid clearance in rabbits.](http://www.ncbi.nlm.nih.gov/pubmed/10825338?ordinalpos=98&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Nielsen VG, Baird MS, Geary BT, **Matalon S**. Anesth Analg. 2000 Jun;90(6):1445-9. PMID: 10825338

[Carbon dioxide enhances nitration of surfactant protein A by activated alveolar macrophages.](http://www.ncbi.nlm.nih.gov/pubmed/10781434?ordinalpos=99&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Zhu S, Basiouny KF, Crow JP, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2000 May;278(5):L1025-31. PMID: 10781434

[DETANONOate, a nitric oxide donor, decreases amiloride-sensitive alveolar fluid clearance in rabbits.](http://www.ncbi.nlm.nih.gov/pubmed/10764305?ordinalpos=100&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Nielsen VG, Baird MS, Chen L, **Matalon S**. Am J Respir Crit Care Med. 2000 Apr;161(4 Pt 1):1154-60.

PMID: 10764305

[Biophysical properties and molecular characterization of amiloride-sensitive sodium channels in A549 cells.](http://www.ncbi.nlm.nih.gov/pubmed/10749763?ordinalpos=101&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Lazrak A, Samanta A, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2000 Apr;278(4):L848-57. PMID: 10749763

[Mechanisms of increased Na(+) transport in ATII cells by cAMP: we agree to disagree and do more experiments.](http://www.ncbi.nlm.nih.gov/pubmed/10666105?ordinalpos=102&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Lazrak A, Nielsen VG, **Matalon S**. Am J Physiol Lung Cell Mol Physiol. 2000 Feb;278(2):L233-8. Review. PMID: 10666105

[Oxidant-mediated lung injury in the acute respiratory distress syndrome.](http://www.ncbi.nlm.nih.gov/pubmed/10507639?ordinalpos=103&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Matthay MA, Geiser T, **Matalon S**, Ischiropoulos H. Crit Care Med. 1999 Sep;27(9):2028-30. No abstract available. PMID: 10507639

[Surfactant protein B deficiency worsens hyperoxic injury to the alveolar epithelium.](http://www.ncbi.nlm.nih.gov/pubmed/10502553?ordinalpos=104&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Hickman-Davis J, **Matalon S**. Am J Respir Cell Mol Biol. 1999 Oct;21(4):449-50. Review. No abstract available. PMID: 10502553

[Nitric oxide inhibits heterologous CFTR expression in polarized epithelial cells.](http://www.ncbi.nlm.nih.gov/pubmed/10409234?ordinalpos=105&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Jilling T, Haddad IY, Cheng SH, **Matalon S**. Am J Physiol. 1999 Jul;277(1 Pt 1):L89-96. PMID: 10409234

[Biochemical characterization of human S-nitrosohemoglobin. Effects on oxygen binding and transnitrosation.](http://www.ncbi.nlm.nih.gov/pubmed/10336440?ordinalpos=106&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Patel RP, Hogg N, Spencer NY, Kalyanaraman B, **Matalon S**, Darley-Usmar VM.

J Biol Chem. 1999 May 28;274(22):15487-92. PMID: 10336440

[Extreme, progressive isovolemic hemodilution with 5% human albumin, PentaLyte, or Hextend does not cause hepatic ischemia or histologic injury in rabbits.](http://www.ncbi.nlm.nih.gov/pubmed/10319792?ordinalpos=107&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Nielsen VG, Baird MS, Brix AE, **Matalon S**.

Anesthesiology. 1999 May;90(5):1428-35. PMID: 10319792

[Surfactant protein A mediates mycoplasmacidal activity of alveolar macrophages by production of peroxynitrite.](http://www.ncbi.nlm.nih.gov/pubmed/10220400?ordinalpos=108&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Hickman-Davis J, Gibbs-Erwin J, Lindsey JR, **Matalon S**. Proc Natl Acad Sci U S A. 1999 Apr 27;96(9):4953-8. PMID: 10220400

[Sodium channels in alveolar epithelial cells: molecular characterization, biophysical properties, and physiological significance.](http://www.ncbi.nlm.nih.gov/pubmed/10099704?ordinalpos=109&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, O'Brodovich H.Annu Rev Physiol. 1999;61:627-61. Review. PMID: 10099704

[Nitrated SP-A does not enhance adherence of Pneumocystis carinii to alveolar macrophages.](http://www.ncbi.nlm.nih.gov/pubmed/9843839?ordinalpos=110&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Zhu S, Kachel DL, Martin WJ 2nd, **Matalon S**.Am J Physiol. 1998 Dec;275(6 Pt 1):L1031-9. PMID: 9843839

[cAMP activation of chloride and fluid secretion across the rabbit alveolar epithelium.](http://www.ncbi.nlm.nih.gov/pubmed/9843850?ordinalpos=111&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Nielsen VG, DuVall MD, Baird MS, **Matalon S**. Am J Physiol. 1998 Dec;275(6 Pt 1):L1127-33. PMID: 9843850

[Hydrogen peroxide inhibits cAMP-induced Cl- secretion across colonic epithelial cells.](http://www.ncbi.nlm.nih.gov/pubmed/9814980?ordinalpos=112&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

DuVall MD, Guo Y, **Matalon S**.Am J Physiol. 1998 Nov;275(5 Pt 1):C1313-22. PMID: 9814980

[Contribution of reactive oxygen and nitrogen species to particulate-induced lung injury.](http://www.ncbi.nlm.nih.gov/pubmed/9788891?ordinalpos=113&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Zhu S, Manuel M, Tanaka S, Choe N, Kagan E, **Matalon S**. Environ Health Perspect. 1998 Oct;106 Suppl 5:1157-63. Review. PMID: 9788891

[Asbestos inhalation induces reactive nitrogen species and nitrotyrosine formation in the lungs and pleura of the rat.](http://www.ncbi.nlm.nih.gov/pubmed/9664087?ordinalpos=114&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Tanaka S, Choe N, Hemenway DR, Zhu S**, Matalon S**, Kagan E. J Clin Invest. 1998 Jul 15;102(2):445-54. PMID: 9664087

[Peroxynitrite inhibits amiloride-sensitive Na+ currents in Xenopus oocytes expressing alpha beta gamma-rENaC.](http://www.ncbi.nlm.nih.gov/pubmed/9612230?ordinalpos=115&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) DuVall MD, Zhu S, Fuller CM, **Matalon S**. Am J Physiol. 1998 May;274(5 Pt 1):C1417-23. PMID: 9612230

[Modulation of rat lung Na+,K(+)-ATPase gene expression by hyperoxia.](http://www.ncbi.nlm.nih.gov/pubmed/9555575?ordinalpos=116&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Johnson CR, Guo Y, Helton ES, **Matalon S**, Jackson RM. Exp Lung Res. 1998 Mar-Apr;24(2):173-88. PMID: 9555575

[Nitric oxide inhibits Na+ absorption across cultured alveolar type II monolayers.](http://www.ncbi.nlm.nih.gov/pubmed/9530172?ordinalpos=117&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Guo Y, DuVall MD, Crow JP, **Matalon S**. Am J Physiol. 1998 Mar;274(3 Pt 1):L369-77. PMID: 9530172

[Surfactant protein A mediates mycoplasmacidal activity of alveolar macrophages.](http://www.ncbi.nlm.nih.gov/pubmed/9486213?ordinalpos=118&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Hickman-Davis JM, Lindsey JR, Zhu S, **Matalon S**. Am J Physiol. 1998 Feb;274(2 Pt 1):L270-7. PMID: 9486213

[Inhibition of surfactant function by copper-zinc superoxide dismutase (CuZn-SOD).](http://www.ncbi.nlm.nih.gov/pubmed/9375318?ordinalpos=119&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Haddad IY, Nieves-Cruz B, **Matalon S**. J Appl Physiol. 1997 Nov;83(5):1545-50. PMID: 9375318

[Differential induction of c-fos, c-jun, and apoptosis in lung epithelial cells exposed to ROS or RNS.](http://www.ncbi.nlm.nih.gov/pubmed/9357854?ordinalpos=120&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Janssen YM, **Matalon S**, Mossman BT. Am J Physiol. 1997 Oct;273(4 Pt 1):L789-96. PMID: 9357854

[Exosurf enhances adenovirus-mediated gene transfer to alveolar type II cells.](http://www.ncbi.nlm.nih.gov/pubmed/9357848?ordinalpos=121&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Manuel SM, Guo Y, **Matalon** S. Am J Physiol. 1997 Oct;273(4 Pt 1):L741-8. PMID: 9357848

[The interplay of nitric oxide and peroxynitrite with signal transduction pathways: implications for disease.](http://www.ncbi.nlm.nih.gov/pubmed/9352609?ordinalpos=122&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) McAndrew J, Patel RP, Jo H, Cornwell T, Lincoln T, Moellering D, White CR, **Matalon S**, Darley-Usmar V. Semin Perinatol. 1997 Oct;21(5):351-66. Review. PMID: 9352609

[Modulation of adenovirus-mediated gene transfer by nitric oxide.](http://www.ncbi.nlm.nih.gov/pubmed/9160832?ordinalpos=123&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Haddad IY, Sorscher EJ, Garver RI Jr, Hong J, Tzeng E, **Matalon S**. Am J Respir Cell Mol Biol. 1997 May;16(5):501-9. PMID: 9160832

[Protein kinase A phosphorylation and G protein regulation of type II pneumocyte Na+ channels in lipid bilayers.](http://www.ncbi.nlm.nih.gov/pubmed/9142851?ordinalpos=124&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Berdiev BK, Shlyonsky VG, Senyk O, Keeton D, Guo Y, **Matalon S**, Cantiello HF, Prat AG, Ausiello DA, Ismailov II, Benos DJ. Am J Physiol. 1997 Apr;272(4 Pt 1):C1262-70. PMID: 9142851

[Mechanisms and sequelae of increased alveolar fluid clearance in hyperoxic rats.](http://www.ncbi.nlm.nih.gov/pubmed/9124596?ordinalpos=125&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Yue G, **Matalon S**.

Am J Physiol. 1997 Mar;272(3 Pt 1):L407-12. PMID: 9124596

[Identification of nitration sites on surfactant protein A by tandem electrospray mass spectrometry.](http://www.ncbi.nlm.nih.gov/pubmed/8914938?ordinalpos=126&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Greis KD, Zhu S, **Matalon S**. Arch Biochem Biophys. 1996 Nov 15;335(2):396-402. PMID: 8914938

[Quantitation of the alveolar distribution of surfactant mixtures in normal and injured lungs.](http://www.ncbi.nlm.nih.gov/pubmed/8879178?ordinalpos=127&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Pataki G, Czopf L, Holm BA, **Matalon S**. Am J Respir Cell Mol Biol. 1996 Oct;15(4):451-9. PMID: 8879178

[Nitration of surfactant protein A (SP-A) tyrosine residues results in decreased mannose binding ability.](http://www.ncbi.nlm.nih.gov/pubmed/8806782?ordinalpos=128&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Zhu S, Haddad IY, **Matalon S**. Arch Biochem Biophys. 1996 Sep 1;333(1):282-90. PMID: 8806782

[Biophysical and molecular properties of amiloride-inhibitable Na+ channels in alveolar epithelial cells.](http://www.ncbi.nlm.nih.gov/pubmed/8760127?ordinalpos=129&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

**Matalon S**, Benos DJ, Jackson RM. Am J Physiol. 1996 Jul;271(1 Pt 1):L1-22. Review. PMID: 8760127

[Inhibition of alveolar type II cell ATP and surfactant synthesis by nitric oxide.](http://www.ncbi.nlm.nih.gov/pubmed/8764213?ordinalpos=130&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Haddad IY, Zhu S, Crow J, Barefield E, Gadilhe T, **Matalon S**. Am J Physiol. 1996 Jun;270(6 Pt 1):L898-906. PMID: 8764213

[Clinical surfactant preparations mediate SOD and catalase uptake by type II cells and lung tissue.](http://www.ncbi.nlm.nih.gov/pubmed/8928827?ordinalpos=131&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Nieves-Cruz B, Rivera A, Cifuentes J, Pataki G, **Matalon S**, Carlo WA, Tanswell AK, Freeman B.

Am J Physiol. 1996 Apr;270(4 Pt 1):L659-67. PMID: 8928827

[Nitration of surfactant protein A results in decreased ability to aggregate lipids.](http://www.ncbi.nlm.nih.gov/pubmed/8779998?ordinalpos=132&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Haddad IY, Zhu S, Ischiropoulos H**, Matalon S**. Am J Physiol. 1996 Feb;270(2 Pt 1):L281-8. PMID: 8779998

[Inhaled nitric oxide injures the pulmonary surfactant system of lambs in vivo.](http://www.ncbi.nlm.nih.gov/pubmed/8779997?ordinalpos=133&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, DeMarco V, Haddad IY, Myles C, Skimming JW, Schürch S, Cheng S, Cassin S. Am J Physiol. 1996 Feb;270(2 Pt 1):L273-80. PMID: 8779997

[Adult alveolar type II cells lack cAMP and Ca(2+)-activated Cl-channels.](http://www.ncbi.nlm.nih.gov/pubmed/8573151?ordinalpos=134&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Zhu S, Yue G, Shoemaker RL, **Matalon S**. Biochem Biophys Res Commun. 1996 Jan 5;218(1):302-8. PMID: 8573151

[Regulation of fluid-phase endocytosis in alveolar macrophages.](http://www.ncbi.nlm.nih.gov/pubmed/7485525?ordinalpos=135&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Pataki G, Czopf L, Jilling T, Marczin N, Catravas J, **Matalon S**. Am J Physiol. 1995 Oct;269(4 Pt 1):L520-6. PMID: 7485525

[Increased expression and activity of sodium channels in alveolar type II cells of hyperoxic rats.](http://www.ncbi.nlm.nih.gov/pubmed/7667305?ordinalpos=136&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Yue G, Russell WJ, Benos DJ, Jackson RM, Olman MA, **Matalon S**. Proc Natl Acad Sci U S A. 1995 Aug 29;92(18):8418-22. PMID: 7667305

[Liver ischemia-reperfusion increases pulmonary permeability in rat: role of circulating xanthine oxidase.](http://www.ncbi.nlm.nih.gov/pubmed/7611420?ordinalpos=138&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Weinbroum A, Nielsen VG, Tan S, Gelman S, **Matalon S**, Skinner KA, Bradley E Jr, Parks DA. Am J Physiol. 1995 Jun;268(6 Pt 1):G988-96. PMID: 7611420

[Hyperoxic lung injury reduces exogenous surfactant clearance in vivo.](http://www.ncbi.nlm.nih.gov/pubmed/7767528?ordinalpos=139&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Novotny WE, Hudak BB, **Matalon S**, Holm BA. Am J Respir Crit Care Med. 1995 Jun;151(6):1843-7. PMID: 7767528

[Reconstitution of immunopurified alveolar type II cell Na+ channel protein into planar lipid bilayers.](http://www.ncbi.nlm.nih.gov/pubmed/7762607?ordinalpos=140&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Senyk O, Ismailov I, Bradford AL, Baker RR, **Matalon S**, Benos DJ. Am J Physiol. 1995 May;268(5 Pt 1):C1148-56. PMID: 7762607

[Interaction of surfactant mixtures with reactive oxygen and nitrogen species.](http://www.ncbi.nlm.nih.gov/pubmed/7649915?ordinalpos=141&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Cifuentes J, Ruiz-Oronoz J, Myles C, Nieves B, Carlo WA, **Matalon S**. J Appl Physiol. 1995 May;78(5):1800-5. PMID: 7649915

Cationic lipids for reporter gene and CFTR transfer to rat pulmonary epithelium. Gene Ther. 1995 Jan;2(1):38-49. Logan JJ, Bebok Z, Walker LC, Peng S, Felgner PL, Siegal GP, frizzell RA, Dong J, Howard M, **Matalon S**, et al.

[Quantitation of nitrotyrosine levels in lung sections of patients and animals with acute lung injury.](http://www.ncbi.nlm.nih.gov/pubmed/7989597?ordinalpos=142&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Haddad IY, Pataki G, Hu P, Galliani C, Beckman JS, **Matalon S**. J Clin Invest. 1994 Dec;94(6):2407-13. PMID: 7989597

[Informed consent to participate in a research study -- gene therapy for cystic fibrosis using cationic liposome mediated gene transfer: a phase I trial of safety and efficacy in the nasal airway.](http://www.ncbi.nlm.nih.gov/pubmed/11644637?ordinalpos=143&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Sorscher EJ, Logan JJ, Frizzell RA, Lyrene RK, Bebok Z, Dong JY, DuVall MD, Felgner PL, **Matalon S**, Walker L, Wiatrak BJ. Hum Gene Ther. 1994 Oct;5(10):1271-7. No abstract available. PMID: 11644637

[Gene therapy for cystic fibrosis using cationic liposome mediated gene transfer: a phase I trial of safety and efficacy in the nasal airway.](http://www.ncbi.nlm.nih.gov/pubmed/7531503?ordinalpos=144&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Sorscher EJ, Logan JJ, Frizzell RA, Lyrene RK, Bebok Z, Dong JY, DuVall MD, Felgner PL, **Matalon S**, Walker L, et al. Hum Gene Ther. 1994 Oct;5(10):1259-77. No abstract available. PMID: 7531503

[Manganese superoxide dismutase expression in alveolar type II epithelial cells from nonventilated and hypoperfused lungs.](http://www.ncbi.nlm.nih.gov/pubmed/8086173?ordinalpos=145&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Russell WJ, **Matalon S**, Jackson RM. Am J Respir Cell Mol Biol. 1994 Sep;11(3):366-71. PMID: 8086173

[Concurrent generation of nitric oxide and superoxide damages surfactant protein A.](http://www.ncbi.nlm.nih.gov/pubmed/7943250?ordinalpos=146&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Haddad IY, Crow JP, Hu P, Ye Y, Beckman J, **Matalon S**. Am J Physiol. 1994 Sep;267(3 Pt 1):L242-9. PMID: 7943250

[Regulation of low-amiloride-affinity sodium channels in alveolar type II cells.](http://www.ncbi.nlm.nih.gov/pubmed/8048548?ordinalpos=147&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Yue G, Shoemaker RL, **Matalon S**. Am J Physiol. 1994 Jul;267(1 Pt 1):L94-100. PMID: 8048548

[Peroxynitrite inhibition of oxygen consumption and sodium transport in alveolar type II cells.](http://www.ncbi.nlm.nih.gov/pubmed/8023951?ordinalpos=148&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Hu P, Ischiropoulos H, Beckman JS, **Matalon S**. Am J Physiol. 1994 Jun;266(6 Pt 1):L628-34.

PMID: 8023951

[Structural and functional alterations of surfactant protein A by peroxynitrite.](http://www.ncbi.nlm.nih.gov/pubmed/8131621?ordinalpos=149&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Haddad IY, Beckman JS, Garver RI, **Matalon S**. Chest. 1994 Mar;105(3 Suppl):84S. No abstract available. PMID: 8131621

[Peroxynitrite inhibition of oxygen consumption and ion transport in alveolar type II pneumocytes.](http://www.ncbi.nlm.nih.gov/pubmed/8131617?ordinalpos=150&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

**Matalon S**, Hu P, Ischiropoulos H, Beckman JS. Chest. 1994 Mar;105(3 Suppl):74S. No abstract available. PMID: 8131617

["Natural surfactant and hyperoxic lung injury in primates".](http://www.ncbi.nlm.nih.gov/pubmed/8005890?ordinalpos=151&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Haddad IY. J Appl Physiol. 1994 Mar;76(3):989-90. No abstract available. PMID: 8005890

[Dependence of surfactant function on extracellular pH: mechanisms and modifications.](http://www.ncbi.nlm.nih.gov/pubmed/8175575?ordinalpos=152&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Haddad IY, Holm BA, Hlavaty L, **Matalon S**. J Appl Physiol. 1994 Feb;76(2):657-62. PMID: 8175575

[Upregulation of sodium conductive pathways in alveolar type II cells in sublethal hyperoxia.](http://www.ncbi.nlm.nih.gov/pubmed/8304467?ordinalpos=153&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Haskell JF, Yue G, Benos DJ, **Matalon S**. Am J Physiol. 1994 Jan;266(1 Pt 1):L30-7. PMID: 8304467

[Mechanisms of peroxynitrite-induced injury to pulmonary surfactants.](http://www.ncbi.nlm.nih.gov/pubmed/8279572?ordinalpos=154&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Haddad IY, Ischiropoulos H, Holm BA, Beckman JS, Baker JR, **Matalon S**. Am J Physiol. 1993 Dec;265(6 Pt 1):L555-64. PMID: 8279572

[Mitigation of oxidant injury to lung microvasculature by intratracheal instillation of antioxidant enzymes.](http://www.ncbi.nlm.nih.gov/pubmed/8238368?ordinalpos=155&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Barnard ML, Baker RR, **Matalon S**. Am J Physiol. 1993 Oct;265(4 Pt 1):L340-5. PMID: 8238368

[Culture-induced alterations in alveolar type II cell Na+ conductance.](http://www.ncbi.nlm.nih.gov/pubmed/8214019?ordinalpos=156&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Yue G, Hu P, Oh Y, Jilling T, Shoemaker RL, Benos DJ, Cragoe EJ Jr, **Matalon S**. Am J Physiol. 1993 Sep;265(3 Pt 1):C630-40.

PMID: 8214019

[Fetal lung epithelial cells contain two populations of amiloride-sensitive Na+ channels.](http://www.ncbi.nlm.nih.gov/pubmed/8386466?ordinalpos=157&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Bauer ML, Benos DJ, Kleyman TR, Lin C, Cragoe EJ Jr, O'Brodovich H. Am J Physiol. 1993 Apr;264(4 Pt 1):L357-64. PMID: 8386466

[Oxidant injury to the alveolar epithelium: biochemical and pharmacologic studies.](http://www.ncbi.nlm.nih.gov/pubmed/8439407?ordinalpos=158&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Freeman BA, Panus PC, **Matalon S**, Buckley BJ, Baker RR. Res Rep Health Eff Inst. 1993 Jan;(54):1-30; discussion 31-9.

PMID: 8439407

[Quantitation of alveolar distribution of liposome-entrapped antioxidant enzymes.](http://www.ncbi.nlm.nih.gov/pubmed/1443162?ordinalpos=159&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Baker RR, Czopf L, Jilling T, Freeman BA, Kirk KL, **Matalon S**. Am J Physiol. 1992 Nov;263(5 Pt 1):L585-94. PMID: 1443162

[Biochemical evidence for the presence of an amiloride binding protein in adult alveolar type II pneumocytes.](http://www.ncbi.nlm.nih.gov/pubmed/1326526?ordinalpos=160&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Oh Y, **Matalon S**, Kleyman TR, Benos DJ. J Biol Chem. 1992 Sep 15;267(26):18498-504. Erratum in: J Biol Chem 1992 Dec 25;267(36):26200. PMID: 1326526

[Immunocytochemical and functional characterization of Na+ conductance in adult alveolar pneumocytes.](http://www.ncbi.nlm.nih.gov/pubmed/1375433?ordinalpos=161&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Kirk KL, Bubien JK, Oh Y, Hu P, Yue G, Shoemaker R, Cragoe EJ Jr, Benos DJ. Am J Physiol. 1992 May;262(5 Pt 1):C1228-38. PMID: 1375433

[Mechanisms of extracellular reactive oxygen species injury to the pulmonary microvasculature.](http://www.ncbi.nlm.nih.gov/pubmed/1601778?ordinalpos=162&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Barnard ML, **Matalon S**. J Appl Physiol. 1992 May;72(5):1724-9. PMID: 1601778

[Peroxynitrite inhibits sodium uptake in rat colonic membrane vesicles.](http://www.ncbi.nlm.nih.gov/pubmed/1550856?ordinalpos=163&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Bauer ML, Beckman JS, Bridges RJ, Fuller CM, **Matalon S**. Biochim Biophys Acta. 1992 Feb 17;1104(1):87-94. PMID: 1550856

[Mechanisms of H2O2-mediated injury to type II cell surfactant metabolism and protection with PEG-catalase.](http://www.ncbi.nlm.nih.gov/pubmed/1951666?ordinalpos=164&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Holm BA, Hudak BB, Keicher L, Cavanaugh C, Baker RR, Hu P, **Matalon S**. Am J Physiol. 1991 Nov;261(5 Pt 1):C751-7. PMID: 1951666

[Mechanisms and regulation of ion transport in adult mammalian alveolar type II pneumocytes.](http://www.ncbi.nlm.nih.gov/pubmed/1951664?ordinalpos=165&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

**Matalon S**. Am J Physiol. 1991 Nov;261(5 Pt 1):C727-38. Review. PMID: 1951664

[Amiloride-inhibitable Na+ conductive pathways in alveolar type II pneumocytes.](http://www.ncbi.nlm.nih.gov/pubmed/1996666?ordinalpos=166&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Bridges RJ, Benos DJ. Am J Physiol. 1991 Feb;260(2 Pt 1):L90-6. PMID: 1996666

[Mechanisms of extracellular hydrogen peroxide clearance by alveolar type II pneumocytes.](http://www.ncbi.nlm.nih.gov/pubmed/2077003?ordinalpos=167&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Engstrom PC, Easterling L, Baker RR, **Matalon S**. J Appl Physiol. 1990 Dec;69(6):2078-84. PMID: 2077003

[Endogenous xanthine oxidase-derived O2 metabolites inhibit surfactant metabolism.](http://www.ncbi.nlm.nih.gov/pubmed/2221090?ordinalpos=168&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Baker RR, Panus PC, Holm BA, Engstrom PC, Freeman BA, **Matalon S**. Am J Physiol. 1990 Oct;259(4 Pt 1):L328-34.

PMID: 2221090

[Characterization of antioxidant activities of pulmonary surfactant mixtures.](http://www.ncbi.nlm.nih.gov/pubmed/2393661?ordinalpos=169&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Holm BA, Baker RR, Whitfield MK, Freeman BA. Biochim Biophys Acta. 1990 Aug 17;1035(2):121-7. PMID: 2393661

[Quantitative ultrastructural study of the rabbit lung: exposure to 60% oxygen for 21 days.](http://www.ncbi.nlm.nih.gov/pubmed/2396331?ordinalpos=170&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Nickerson PA, **Matalon S**. Undersea Biomed Res. 1990 Jul;17(4):323-31. PMID: 2396331

[Role of pulmonary surfactant in the development and treatment of adult respiratory distress syndrome.](http://www.ncbi.nlm.nih.gov/pubmed/2686493?ordinalpos=171&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Holm BA, **Matalon S**. Anesth Analg. 1989 Dec;69(6):805-18. Review. PMID: 2686493

[Tumor necrosis factor and interleukin 1 alpha increase vascular endothelial permeability.](http://www.ncbi.nlm.nih.gov/pubmed/2610269?ordinalpos=172&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Royall JA, Berkow RL, Beckman JS, Cunningham MK, **Matalon S**, Freeman BA. Am J Physiol. 1989 Dec;257(6 Pt 1):L399-410. PMID: 2610269

Responses of type II pneumocyte antioxidant enzymes to normoxic and hyperoxic culture. Panus PC, **Matalon S**, Freeman BA. In Vitro Cell Dev Biol. 1989 Sep;25(9):821-9.

[Surfactant replacement attenuates the increase in alveolar permeability in hyperoxia.](http://www.ncbi.nlm.nih.gov/pubmed/2793671?ordinalpos=175&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Engstrom PC, Holm BA, **Matalon S**. J Appl Physiol. 1989 Aug;67(2):688-93. PMID: 2793671

[Development of O2 tolerance in rabbits with no increase in antioxidant enzymes.](http://www.ncbi.nlm.nih.gov/pubmed/2732159?ordinalpos=176&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Baker RR, Holm BA, Panus PC, **Matalon S**. J Appl Physiol. 1989 Apr;66(4):1679-84. PMID: 2732159

[Alveolar hyperoxic injury in rabbits receiving exogenous surfactant.](http://www.ncbi.nlm.nih.gov/pubmed/2496084?ordinalpos=177&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Loewen GM, Holm BA, Milanowski L, Wild LM, Notter RH, **Matalon S**. J Appl Physiol. 1989 Mar;66(3):1087-92. PMID: 2496084

[Oxidant inhibition of epithelial active sodium transport.](http://www.ncbi.nlm.nih.gov/pubmed/2502482?ordinalpos=178&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Beckman JS, Duffey ME, Freeman BA. Free Radic Biol Med. 1989;6(6):557-64. PMID: 2502482

[Type II pneumocyte changes during hyperoxic lung injury and recovery.](http://www.ncbi.nlm.nih.gov/pubmed/3215867?ordinalpos=179&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Holm BA, **Matalon S**, Finkelstein JN, Notter RH. J Appl Physiol. 1988 Dec;65(6):2672-8. PMID: 3215867

[Sublethal hyperoxic injury to the alveolar epithelium and the pulmonary surfactant system.](http://www.ncbi.nlm.nih.gov/pubmed/3208725?ordinalpos=180&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Holm BA, Loewen GM, Baker RR, Notter RH. Exp Lung Res. 1988;14 Suppl:1021-33. PMID: 3208725

[Alveolar epithelial changes in rabbits after a 21-day exposure to 60% O2.](http://www.ncbi.nlm.nih.gov/pubmed/3610919?ordinalpos=181&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Holm BA, Notter RH, Leary JF, **Matalon S**. J Appl Physiol. 1987 Jun;62(6):2230-6. PMID: 3610919

[Mitigation of pulmonary hyperoxic injury by administration of exogenous surfactant.](http://www.ncbi.nlm.nih.gov/pubmed/3558235?ordinalpos=182&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Holm BA, Notter RH. J Appl Physiol. 1987 Feb;62(2):756-61. PMID: 3558235

Effects of hyperoxia on alveolar permeability of neutropenic rabbits. Laughlin MJ, Wild L, Nickerson PA, **Matalon S**. J Appl Physiol. 1986 Sep;61(3):1126-31.

[Reversibility of oxygen-induced injury to the alveolar epithelium: an ultrastructural study.](http://www.ncbi.nlm.nih.gov/pubmed/3014700?ordinalpos=184&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Nickerson PA, **Matalon S**. Undersea Biomed Res. 1986 Jun;13(2):181-92. PMID: 3014700

[Intravenous bleomycin does not alter the toxic effects of hyperoxia in rabbits.](http://www.ncbi.nlm.nih.gov/pubmed/2421613?ordinalpos=185&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Harper WV, Nickerson PA, Olszowka J. Anesthesiology. 1986 May;64(5):614-9. PMID: 2421613

[Pulmonary physiological and surfactant changes during injury and recovery from hyperoxia.](http://www.ncbi.nlm.nih.gov/pubmed/3840800?ordinalpos=186&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Holm BA, Notter RH, Seigle J, **Matalon S**. J Appl Physiol. 1985 Nov;59(5):1402-9. PMID: 3840800

[Modification of pulmonary oxygen toxicity by bleomycin treatment.](http://www.ncbi.nlm.nih.gov/pubmed/2409069?ordinalpos=187&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Harper WV, Goldinger JM, Nickerson PA, Olszowka J. J Appl Physiol. 1985 Jun;58(6):1802-9. PMID: 2409069

[Peripheral circulatory responses to 96 hours of eucapnic hypoxia in conscious sheep.](http://www.ncbi.nlm.nih.gov/pubmed/3983486?ordinalpos=188&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Krasney JA, Hajduczok G, Miki K, **Matalon S**. Respir Physiol. 1985 Feb;59(2):197-211. PMID: 3983486

[Effects of 100% oxygen breathing on the capillary filtration coefficient in rabbit lungs.](http://www.ncbi.nlm.nih.gov/pubmed/3982287?ordinalpos=189&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Cesar MA. Microvasc Res. 1985 Jan;29(1):70-80. PMID: 3982287

[Interstitial fluid volumes and albumin spaces in pulmonary oxygen toxicity.](http://www.ncbi.nlm.nih.gov/pubmed/6511551?ordinalpos=190&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Egan EA.

J Appl Physiol. 1984 Dec;57(6):1767-72. PMID: 6511551

[Regional circulatory responses to 96 hours of hypoxia in conscious sheep.](http://www.ncbi.nlm.nih.gov/pubmed/6484323?ordinalpos=191&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Krasney JA, McDonald BW, **Matalon S**. Respir Physiol. 1984 Jul;57(1):73-88. PMID: 6484323

[Cardiac output and regional oxygen transport in the acutely hypoxic conscious sheep.](http://www.ncbi.nlm.nih.gov/pubmed/6635378?ordinalpos=192&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Nesarajah MS, **Matalon S**, Krasney JA, Farhi LE. Respir Physiol. 1983 Aug;53(2):161-72. PMID: 6635378

[Effects of acute hypercapnia on the central and peripheral circulation of conscious sheep.](http://www.ncbi.nlm.nih.gov/pubmed/6841227?ordinalpos=193&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Nesarajah MS, Krasney JA, Farhi LE. J Appl Physiol. 1983 Mar;54(3):803-8. PMID: 6841227

[Pulmonary and circulatory changes in conscious sheep exposed to 100% O2 at 1 ATA.](http://www.ncbi.nlm.nih.gov/pubmed/6811521?ordinalpos=194&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Nesarajah MS, Farhi LE. J Appl Physiol. 1982 Jul;53(1):110-6. PMID: 6811521

[Effects of hyperventilation on pulmonary blood flow and recirculation time of humans.](http://www.ncbi.nlm.nih.gov/pubmed/6807942?ordinalpos=195&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Dashkoff N, Nesarajah MS, Klocke FJ, Farhi LE. J Appl Physiol. 1982 May;52(5):1161-6. PMID: 6807942

[Effects of 100% O2 breathing on permeability of alveolar epithelium to solute.](http://www.ncbi.nlm.nih.gov/pubmed/6266994?ordinalpos=196&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon S**, Egan EA.

J Appl Physiol. 1981 Apr;50(4):859-63. PMID: 6266994

[An ultrastructural study of alveolar permeability to cytochrome C in the rabbit lung: effect of exposure to 100% oxygen at one atmosphere.](http://www.ncbi.nlm.nih.gov/pubmed/6258439?ordinalpos=197&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) Nickerson PA, **Matalon S**, Farhi LE. Am J Pathol. 1981 Jan;102(1):1-9. No abstract available. PMID: 6258439

[Ventilation-perfusion lines and gas exchange in liquid breathing: theory.](http://www.ncbi.nlm.nih.gov/pubmed/6772616?ordinalpos=198&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon SV**, Farhi LE.

J Appl Physiol. 1980 Aug;49(2):262-9. PMID: 6772616

[Cardiopulmonary readjustments in passive tilt.](http://www.ncbi.nlm.nih.gov/pubmed/533742?ordinalpos=199&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon SV**, Farhi LE. J Appl Physiol. 1979 Sep;47(3):503-7. PMID: 533742

[Central hypoventilation syndrome: experience with bilateral phrenic nerve pacing in 3 neonates.](http://www.ncbi.nlm.nih.gov/pubmed/354443?ordinalpos=200&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Hunt CE, **Matalon SV**, Thompson TR, Demuth S, Loew JM, Liu HM, Mastri A, Burke B. Am Rev Respir Dis. 1978 Jul;118(1):23-8. PMID: 354443

[The effects of changes of maternal PaO2 and PaCO2 on the fetal PaO2 and PaCO2--in vivo study.](http://www.ncbi.nlm.nih.gov/pubmed/625613?ordinalpos=201&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

**Matalon SV**, Manning PJ, Bernie BJ, Eichorst BC, Hunt CE, Seeds AE. Respir Physiol. 1978 Jan;32(1):51-61. PMID: 625613

[The effect of independent variations in inspiratory-expiratory ratio and end expiratory pressure during mechanical ventilation in hyaline membrane disease: the significance of mean airway pressure.](http://www.ncbi.nlm.nih.gov/pubmed/333078?ordinalpos=202&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Boros SJ, **Matalon SV**, Ewald R, Leonard AS, Hunt CE. J Pediatr. 1977 Nov;91(5):794-8.

PMID: 333078

[Pulmonary capillary filtration and reflection coefficients in the newborn rabbit.](http://www.ncbi.nlm.nih.gov/pubmed/895549?ordinalpos=203&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) **Matalon SV**, Wangensteen OD. Microvasc Res. 1977 Jul;14(1):99-110. PMID: 895549

[An in vivo mass spectrometer system for the continuous monitoring of Po2 and Pco2.](http://www.ncbi.nlm.nih.gov/pubmed/1003310?ordinalpos=204&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

**Matalon SV**, Ewald RG, Hunt CE, Leonard AS. J Pediatr Surg. 1976 Dec;11(6):987-91. PMID: 1003310

[A method for the in vitro measurement of tensions of blood gases with a mass spectrometer.](http://www.ncbi.nlm.nih.gov/pubmed/1128321?ordinalpos=205&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

**Matalon S**, Erickson J, Mosharrafa M, Leonard AS. Med Instrum. 1975 May-Jun;9(3):133-5. PMID: 1128321

[Mass spectrometer evaluation of ventilation-perfusion abnormalities in respiratory distress syndrome.](http://www.ncbi.nlm.nih.gov/pubmed/4275626?ordinalpos=206&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Hunt CE, **Matalon S**, Wangensteen OD, Leonard AS. Pediatr Res. 1974 Jun;8(6):621-7. PMID: 4275626

**Abstracts**

**LUNG ION CHANNELS AND FLUID HOMEOSTASIS (POSTERS):  
Influenza M2 Inhibits CFTR Activity through its Ion Channel Function**James David Londino, Colm Atkins, James Noah, Ahmed Lazrak, and **Sadis Matalon**  
**FASEB J,** Apr 2012; 26: 696.8.

**LUNG ION CHANNELS AND FLUID HOMEOSTASIS (POSTERS):  
Inhibition of Epithelial Sodium Channel Activity by Inter-α-Trypsin Inhibitor**Emily Christine Ness, Ahmed Lazrak, Justin M Jackson, Stavros Garantziotis, and **Sadis Matalon**  
**FASEB J,** Apr 2012; 26: 696.5.

**LUNG ION CHANNELS AND FLUID HOMEOSTASIS (POSTERS):  
Comparison of two types of {delta}ENaC channels cloned from human lungs**HONGLONG JI, Runzhen Zhao, Hongguang Nie, and **Sadis Matalon**  
**FASEB J,** Apr 2012; 26: 696.2.

**ION CHANNELS (POSTERS):  
Inhibition of Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) by Influenza M2 Proton Channel**  
James David Londino, Colm Atkins, Ahmed Lazrak, James Noah, and **Sadis Matalon**  
**FASEB J,** Apr 2011; 25: 1042.19.

**ION CHANNELS (POSTERS):  
Inhibition of ion transport across ATII cells by chlorine**  
Asta Jurkuvenaite, Lan Chen, Stephen F Doran, Weifeng Song, and **Sadis Matalon**  
**FASEB J,** Apr 2011; 25: 1042.8.

Weifeng Song, Teodora Nicola, Zhihong Yu, Laura Cain, Namasivayam Ambalavanan and **Sadis Matalon.**  Exacerbation of Chlorine Gas Induced Airway Hyperresponsiveness by Pre-Existing Respiratory Syncytial Virus Infection, American Thoracic Society International Conference, New Orleans, LA, May 14-19, 2010

Amit K. Yadav, Andrey A. Samal, Naseem Anjum, Kokila Vedagiri, Jaideep Honavar, Angela P. Brandon, Joanne Balanay, Giuseppe L. Squadrito, Michelle V. Fanucchi, Edward Postlethwait, **Sadis Matalon**, Rakesh P. Patel Sodium Nitrite Therapy Mitigates Lung Injury After Chlorine Gas Exposure in Rats, American Thoracic Society International Conference, New Orleans, LA, May 14-19, 2010

Amit K. Yadav, Stephen Doran, Ruchita Sharma, Giuseppe L. Squadrito, Michelle V. Fanucchi, Edward Postlethwait, **Sadis Matalon** Antioxidants attenuate Acute Lung injury post Chlorine gas exposure in rats. American Thoracic Society International Conference, New Orleans, LA, May 14-19, 2010

Amit K. Yadav, Andrey A. Samal, Naseem Anjum, Kokila Vedagiri, Jaideep Honavar, Angela P. Brandon, Joanne Balanay, Giuseppe L. Squadrito, Michelle V. Fanucchi, Edward Postlethwait, **Sadis** **Matalon**, Rakesh P. Patel Sodium Nitrite Administration Mitigates Lung Injury After Chlorine Gas Exposure in Rats Free Radical Biology & Medicine Volume 47, Supplement 1: S104, 2009

Shipeng Wei, Yongjian Zhou, Ahmed Lazrak, Giuseppe L Squadrito, Weifeng Song, and **Sadis Matalon.**  Hypochlorous Acid Inhibits Epithelial Sodium Channel Activity Both *In Vitro* and *In Vivo* Free Radical Biology & Medicine, Volume 45, Supplement 1: S25, 2008.

Karen E Iles, Corinne Zaragoza, Ahmed Lazrak, Weifeng Song, Keith A Jones and **Sadis Matalon**. Chlorine Upregulates Reactive Oxygen Species in Lung Epithelial Cells Free Radical Biology & Medicine, Volume 45, Supplement 1: S46, 2008

Kokilavani Vedagiri, Stephen F. Doran, Devipriya Subramaniyam, Rakesh P. Patel and **Sadis Matalon**. Protective Role of Nitrite on Cl2 Induced Pulmonary Damage and Cell Death. Free Radical Biology & Medicine, Volume 45, Supplement 1: S48, 2008

Jurkuvenaite, A., Chen L., **Matalon S.**, Sorscher, E., Collawn, J. "Protein stability and functional differences of DF508 CFTR after low temperature and corr-4a treatment" Twenty second Annual North American Cystic Fibrosis Conference, Orlando, Florida, October 23-25, 2008

E.I Frances, S.H. Kim, Y. Park, **S. Matalon** Dynamic Surface Tensions (DST’s) of DPPC Dispersions at Conditions. American Thoracic Society International Conference, Toronto, Canada, May 16-18, 2008

*American Journal of Respiratory and Critical Care Medicine* 177: A198, April 2008

S.M. Janciauskiene, I.M. Nita, A. Lazrak, H-L Ji, **S. Matalon** Antitrypsin Decreases Amiloride-Sensitive Currents across Xenopus Oocytes Injected with alphabetagamma ENaC cRNAs. American Thoracic Society International Conference, Toronto, Canada, May 16-18, 2008 *American Journal of Respiratory and Critical Care Medicine* 177: A329, April 2008

T.L. Adair-Kirk, P. Mydel, J.M. Shipley, **S. Matalon**, R.M. Senior. Oxidative and Nitrosative Modifications of Neutrophil Elastase Inhibit Its Ability to Cleave Laminin-322 (aka, Laminin-5). American Thoracic Society International Conference, Toronto, Canada, May 16-18, 2008

*American Journal of Respiratory and Critical Care Medicine* 177: A33, April 2008

W. Song, G. Liu, C. Bosworth, J.R. Walker, A. Lazrak, W.M. Sullender, **S. Matalon**. Inhibition of Na+ Currents in H441 Cells after Respiratory Syncytial Virus Infection. American Thoracic Society International Conference, Toronto, Canada, May 16-18, 2008 *American Journal of Respiratory and Critical Care Medicine* 177: A801, April 2008

D.Subramaniyam, Chad Steele, Gang Liu 1Sabina Janciauskiene and **Sadis Matalon** α1- antitrypsin (α1-AT) instillation decreases neutrophil influx and increases cytokine levels in the BAL of LPS-treated mice. *European Respirator Society, Berlin, Germany October 4-8, 2008*

Chen, L., Bosworh, C.A., Collawn, J. Varga, K., Gao, Z. Clancy, J.P., Fortenberry, Lancaster, J.R, Jr.; **S. Matalon**, Mechanism of Nitric Oxide Stimulation of C1-Secretion Across Airway and Lung Epithelial Cells, *FASEB J 2007 21:901.6*

Ji, H. -L**.,** J. W. Noah, X. -F. Su, K. Shrestha, Q. N. Li, Z. Q. Gao, P.R. Smith, **S. Matalon**, Influenza A M2 Protein Co-expression in *Xenopus* Oocytes Down-regulates Human αβγ ENaC Expression Level and Activity. *ATS 2007 San Francisco International Conference.* San Francisco, California, **May 18-23,** 2007. *American Journal of Respiratory and Critical Care Medicine* 175: A773, April 2007

X. -F. Su, Q. N. Li, K. Shrestha, E. Cormet-Boyaka, L. Chen, P. R. Smith, E. J. Sorscher, D. J. Benos, **S. Matalon**, and H. -L. Ji. Expression and Interactions of Proton-gated Sodium Channel 3 with CFTR in Human Lung Epithelial Cells. *ATS 2007 San Francisco International Conference.* San Francisco, California, **May 18-23,** 2007. *American Journal of Respiratory and Critical Care Medicine* 175:A982, April 2007

Ji, H. -L**.,** L. Chen, K. Shrestha, W. -F. Song, X. -F., Su, P. R. Smith2, Z. -Q. Gao, D. J. Benos, **S. Matalon.** Guanosine nucleotides activate sodium transport in human respiratory epithelial cells. *Experimental Biology 2007 of FASEB*, Washington DC, April 28-May 2, 2007. *FASEB Journal. 21*(5):A553 (No.608.2), 2007.

Squadrito, GL, Leustik, M, Doran, S, Bracher, A, Schoeb, TR, Postlethwait, EM, **Matalon, S**. Mechanisms and modifications of chlorine induced injury to the mammalian lung. FRBM 43:S122, Supplement, 2007.

**Matalon, S**; Chen, L; Collawn, J; Varga, K; Gao, Z; Lancaster, JR. Mechanisms of nitric oxide stimulation of C1-secretion cross airway and lung epithelial cells. FRBM 43:S168-S168, 2007

Song, W; Bosworth, C; Liu, G; Lazrak, A; Sullender, W; Abraham, E; **Matalon, S.** Inhibition of Na+ currents and regulation of NO production in H441 cells by respiratory syncytial virus. FRBM 43:S171-S171, 2007

Ji, H. -L**.,** A. Swoboda, A. Haritha, X. -F. Su, G. L. Squadrito, P. R. Smith, **S. Matalon.** Diamide down-regulates human αβγ ENaC activity in *Xenopus* oocytes. *Experimental Biology 2005 of FASEB*, Washington DC, April 28-May 2, 2007. *FASEB Journal. 21*(6):A1334 (No.938.1), 2007.

Ji, H; Y. He, J. Li, X. Su, P. Smith, **S. Matalon**; Regulation of Human Epithelial Na+ and Cl- Channels by SARS-CoV Proteins. *Proceedings of the American Thoracic Society,* Vol. 3:A784, 2006

Fierro-Perez G.A.; K. Schrestha; J.M. Hickman-Davis; **S. Matalon**; Peroxynitrite treatment of lung epithelial cells decreases α-ENaC levels. *Proceedings of the American Thoracic Society,* Vol*. 3:A692,* 2006

Davis, I.C., P. Factor, W.M. Sullender, **S. Matalon**; Beta Agonist Insensitivity of Alveolar Fluid Clearance in RSV-infected Mice is Pyrimidine-mediated *Proceedings of the*  *American Thoracic Society* Vol. 3:A761, 2006

Fierro-Perez G.A; K. Schrestha, M. Kirk, A. Belaaouaj, E.C. Crouch, **S. Matalon**; Peroxynitrite-Induced Nitration and Cross-Linking of Human Surfactant Protein D (SP-D). *Proceedings of the* *American Thoracic Society* Vol. 3:A191*,* 2006

Kelly, O., J. Wang, L. Chen, **S. Matalon,** H.P Ma; Ceramide mediates cytokine-induced pulmonary edema by inhibiting ENaC. The FASEB Journal. 2006;20:A1231

Squadrito, GL; Williams, SR; Abraham, E; Postlethwait, EM; **Matalon, S**. Acute chlorine exposure causes severe but short-term hypoxemia and depletion of lung antioxidants. FRBM 41:S96-S96 Suppl.1 2006

Ji, H; He, YX; Li, J; **Matalon, S**; Down-regulation of Epithelial Na + and Cl – Channels by SARS-CoV Spike Protein. *Proceedings of International Symposium on advanced Virology,* 2005

Ji, H; Su, X; Cormet-Boyaka, E; Smith, PR; Kirk, KL; Sorscher, EJ; **Matalon, S**; Benos, DJ Proton-Gated Na+ Channel (ASIC3) Interplays with Cystic Fibrosis Transmembrane Conductance Regulator. *19th Annual* *North American Cystic Fibrosis Conference, 2005*

Ji, H; Su, X; Sorscher, EJ; Smith, PR; Benos, DJ; **Matalon, S.** Delta-ENaC Expression in Human Lung Epithelial Cells. *19th Annual North American Cystic Fibrosis Conference, 2005*

Hickman-Davis JM, Davis GC, Devlin RB, Young KR, **Matalon S.** Involvement of Surfactant Protein A and Lipid in Superoxide and Cytokine Production by Human Alveolar Macrophages *In Vitro*. *Proceedings of the American Thoracic Society,* Vol 2: A102, 2005

Chen L, Lewis ER, Ahkmedov AT, Lee HT, **Matalon S.** Adenosine Increases Vectorial Na+ Flux in Alveolar Epithelial Cells. *Proceedings of the American Thoracic Society,* Vol 2: A228, 2005

**Matalon S,** Chen L, Varga K, Bebok Z, Patel R, Collawn J. Modulation of Chloride Secretion across Airway and Alveolar Epithelial Cells by Nitric Oxide and Its Congeners. *Proceedings of the American Thoracic Society,* Vol 2: A299, 2005

Hall NG, Hickman-Davis JM, Davis GC, Liu Y, Myles C, **Matalon S.** Bactericidal Function of Alveolar Macrophages in Mechanically Ventilated Rabbits. *Proceedings of the American Thoracic Society,* Vol 2: A490, 2005

Hickman-Davis JM, McNicholas-Bevensee CM, Davis IC, Davis GC, **Matalon S.** Reactive Oxygen and Nitrogen Species Alter Alveolar Type II Cell Ion Transport during Mycoplasma Infection. *Proceedings of the American Thoracic Society,* Vol 2: A685, 2005

**Matalon S**, Shrestha KN, Hickman-Davis JM, Estevez AG, Landar A, Darley-Usmar V. Proteomic Analysis of Nitrated *K. pneumoniae P*roteins Following Exposure to Reactive Oxygen-Nitrogen Intermediates.  *Proceedings of the American Thoracic Society,* Vol 2: A730, 2005

**Matalon S,** Chen L, Varga K, Bebok Z, Patel R, Collawn J. Regulation of Chloride Secretion in Airway Cells by Nitric Oxide. Abstract 700.17, The *FASEB Journal* 2006, Vol 19

Davis IC, Sullender W, **Matalon S.** Respiratory syncytial virus-induced inhibition of alveolar fluid clearance is insensitive to beta-agonists. Abstract 125.12, *The FASEB Journal* 2006, Vol. 19

Kotamraju, S; **Matalon, S**; Matsuyama, T; Shang, T; Hickman-Davis, JM; Haas, AL; Kalayanaram, B. Nitric Oxide-Dependent Proteolytic signaling; Relevance to Oxidative Stress. *Free Radical Research,* 39S16-S16 Suppl. 1 2005

Kotamraju, S; **Matalon, S**; Matsunaga, T; Shang, TS; Hickman, J; Kalyanaraman, B. Upregulation of Immunoproteasomes by Nitric Oxide: Potential Antioxidative Mechanism in Endothelial Cells. *FRBM* 39:S88-S88 Suppl. 1 2005

Davis IC, Sullender WM, Graves LM, Zhao X, **Matalon S**. Respiratory Syncytial Virus Inhibits Alveolar Fluid Clearance by Inducing Release of de Novo-Synthesized UTP. *Experimental Biology* 2004

Davis IC, Sullender WM, Graves, LM, Zhao X, **Matalon S**. Pyrimidine Biosynthesis and Release Mechanism in Respiratory Syncytial Virus-Induced Inhibition of Alveolar Fluid Clearance. *Am J Respir and Crit Care Med,* Vol 169(7):A669, 2004

Swystun VA, **Matalon S**. Actin Filament Changes Are Associated with Trypsin-Induced Increases in Lung Epithelial Ion Transport and Transepithelial Resistance. *Am J Respir and Crit Care Med,* Vol 169(7):A670, 2004

Hickman-Davis JM, Lazrak A, Davis IC, **Matalon S**. Alterations in Alveolar Type II Cell Ion Transport during Mycoplasma Infection. *Am J Respir and Crit Care Med,* Vol 169(7):A670, 2004

Hickman-Davis JM, Wang Z, Notter RH, **Matalon S**. Decreased SP-A Production and Surfactant Function during Mycoplasma Infection. *Am J Respir and Crit Care Med,* Vol 169(7):A681, 2004

Dieperink HI, **Matalon S.**, Prince LS. Hyperoxia Inhibited Distal Lung Branching in Fetal Mouse Lung Explants. *Am J Respir and Crit Care Med*, Vol 169(7):A285, 2004

Dieperink, HI; Okoh, VO; **Matalon, S**; Prince, LS. Hyperoxia increases mesenchymal apoptosis and inhibits distal lung branching in fetal mouse lung explants. *Pediatric Research* 55 (4): 89A-89A Art No. 506 Part 2 Suppl. S 2004

Lazrak, A; Davis, I; **Matalon, S**. Mechanisms of Up Regulation of Epithelial Sodium Channel Activity and Fluid Clearance in Mouse Lung by TNFa. *FASEB Journal* 18 (5): A1042-A1043 Suppl. S 2004

Davis IC, Sullender S, **Matalon S**. Respiratory Syncytial Virus (RSV) Inhibits Alveolar Fluid Clearance in the Mouse. *Am J Respir and Crit Care Med,* Vol 167: A029, ATS 2003

Swystun VA, Hardiman KM, Lazrak A, O’Reilly P, **Matalon S.** Lung Proteases Stimulate Na+ and Cl- Transport in Human Bronchial Epithelial Cells. *Am J Respir and Crit Care Med,* Vol 167: A029, ATS 2003

O’Reilly P, Iles K, Hickman-Davis J, **Matalon S**. Surfactant Protein-A Increases NF-kB but Not MAP-Kinase Activation in Macrophages Stimulated by *Klebsiella Pneumoniae.* *Am J Respir and Crit Care Med,* Vol 167: B022, ATS 2003

Swystun, V; Myles, T; Hardiman, K; **Matalon, S.** Inhibition of Trypsin-Like Proteases Ablates Fluid Clearance from Rat Lung. *FASEB Journal 17* (4) ; A88-A88 Part 1 Suppl. S 2003

Davis IC, Lazrak A, Sullender W and **Matalon S.** Inhibition of Amiloride-Sensitive Na+ Transport in A549 Cells by Respiratory Syncytial Virus. *FASEB J* Vol. 16, 368.1, 2002

Thome, UH; Lazrak, A; Chen, L; Thomas, MJ; Forman, HJ; **Matalon, S**. Reactive Intermediates of SIN-1 Modulate Chloride Secretion across Murine Airway Cells. *Pediatric Research* 52 (5); 787-787 Art No. 48 2002

Hardiman KM, Fortenberry JA, Sorscher E and **Matalon S**. Chronic iNOS Inhibition Blocks Amiloride-Sensitivity of Respiratory Epithelia in Mice *in vivo* and *in vitro*. *FASEB J* Vol. 16, 364.9, 2002

Lazrak A and **Matalon S.** cAMP Increases Na+ Transport in Respiratory Epithelial Cells by Activating Amiloride-Sensitive Na+ Channels. *FASEB J* Vol. 16, 398.5, 2002

Hickman-Davis J, Davis IC, Peti-Peterdi J, O’Reilly P, Young KR and **Matalon S.** SP-A Stimulates Phagocytosis of *Klebsiella Pneumoniae* by Human Alveolar Macrophages *In Vitro.* *Am J Respir and Crit Care Med*, Vol 165(8):A80, 2002

Mantell LL, Romashko J, Kazzaz JA, **Matalon S**, Niederman MS, Scott W, Davis JM. Hyperoxia Causes Cell Injury in Alveolar Macrophages and Reduces *Pseudomonas Aeruginosa* Clearance. *Am J Respir and Crit Care Med,* Vol 165(8):A300, 2002

Leon KJ, Hallit SL, Prabhakaran P, Jackson R, de Andrade J, O’Reilly P, **Matalon S,** Hickman-Davis J and Olman MA. Increases in Plasminogen Activator Inhibitor-1 Predict Chronic Rejection in Lung Transplant Recipients. *Am J Respir and Crit Care Med*, Vol 165(8):A402, 2002

Hardiman KM and **Matalon S.** Purinergic Receptor Blockade Inhibits Amiloride-Sensitive Alveolar Fluid Clearance in C57BL/6 Mice. *Am J Respir and Crit Care Med,* Vol 165(8):A612, 2002

O’Reilly P, Hickman-Davis J, Young KR and **Matalon S.** Effects of Hyperoxia on Nitric Oxide Production, Protein Nitration and Actin Polymerization in Macrophages. *Am J Respir and Crit Care Med,* Vol 165(8):A708, 2002

Thome U, Nguyen S, Ware J and **Matalon S.** Effects of Oxygen Tension and Corticosterone on Sodium Transport in Rat Fetal Alveolar Cells. *FASEB J* Vol. 15(II) 675.5, 2001

Venglarik, CJ; Bebok, Z; Chen, L; Forman, HJ; **Matalon, S**. Oxygen Promotes CFTR Maturation and Trafficking in Mouse Tracheal Epithelial Cells. *FASEB Journal* 15 (5): A859-A859 Part 2 2001

Venglarik, CJ; Verghese, G; Forman, HJ; Matthay, MA; **Matalon, S**. Regulation of Airway Na+ Absorption by Extracellular Protease. *FASEB Journal* 15 (5); A859-A859 Part 2 2001

Lazrak A, Hardiman K, Matthay M and **Matalon S.** TNFa Increases Whole Cell Na+ Currents Across A549 Cells and Mouse ATII Cells. *FASEB J* Vol. 15(II) 675.13, 2001

Davis I, Nolte K, Hjelle B and **Matalon S.** Elevated Production of Reactive Oxygen/Nitrogen Species Associated With Hantavirus Cardiopulmonary Syndrome. *Am J Respir and Crit Care Med* Vol. 163(5):A814, 2001

O’Reilly P, Hickman-Davis J, Gibbs-Erwin J, Young KR and **Matalon S.** Hyperoxic Exposure Reduces Phagocytosis, Bacterial Killing and Nitric Oxide Production by Macrophages. *Am J Respir and Crit Care Med* Vol. 163(5):A378, 2001

Hardiman K and **Matalon S.** Intratracheal Forskolin Does Not Increase Amiloride Sensitive Alveolar Fluid Clearance in iNOS (-/-) Mice. *Am J Respir and Crit Care Med* Vol. 163(5):A570, 2001

Bebok Z, Sorscher E and **Matalon S.** Modulation of CFTR Expression by Nitric Oxide. *Am J Respir and Crit Care Med* Vol. 163(5):A842, 2001

Myles C, Sorscher E and **Matalon S.** Enhancement of Adenovirus Mediated Gene Transfer in Lungs and Epithelial Cells by EGTA. *CHEST 2001,* 122:1S, 2001

Levine, CR; Kazzaz, JA; Koo D; Pollack, S; Merritt, TA; **Matalon, S**. The Effects of Decreasing Concentrations of Nitric Oxide (NO) and oxygen (o-2) on Surfactant Function and Pulmonary Information. *Pediatric Research* 47 (4): 367A-367A Art No. 2165 Part 2 Suppl. S 2000

Myles C, Sorscher E, and **Matalon S**. Augmentation of Adenovirus Mediated Gene Transfer in Epithelial Cells by Calcium Chelation. *FASEB J* 14, 2000

Hardiman KM, J.R. Lindsey JR and **Matalon S.** Modulation of lung edema and active ion transport in hyperoxic mice by nitric oxide. *FASEB J* 14, 2000

Hickman-Davis JM, O'Reilly P, Lindsey JR and **Matalon S**. Surfactant protein A and nitric oxide mediate killing of *klebsiella pneumoniae* by human alveolar macrophages in vitro. *Am J Respir and Crit Care Med* Vol. 161(3):A515, 2000

Hickman-Davis, JM; Lindsey, JR; **Matalon, S**. Nitric Oxide, Neutrophils and Nitrotyrosine in Mycoplasmal Infection *In Vivo*. *FASEB J* 14 (4): A 651-A651 2000

Nielsen VG and **Matalon S.** DETANONOate, a nitric oxide donor, decreases amiloride-sensitive alveolar fluid clearance in rabbits. *Am J Respir and Crit Care Med* Vol. 161(3):A564, 2000

Lazrak A and **Matalon S**. Are chloride ions necessary for cAmp upregulation of na+ transport in rat fetal distal lung epithelial cells? *Am J Respir and Crit Care Med* Vol. 161(3):A446, 2000

Thome U, Chen L, Factor P, Freeman BA, Sznajder JI and **Matalon S**. Mitigation of oxidant injury on active sodium transport in rat fetal ATII cells by na, k-atpase gene transfer *Am J Respir and Crit Care Med* Vol. 161(3):A24, 2000

Venglarik C, Bebok Z, Tousson A, Schwiebert L and **Matalon S**. Oxygen regulates CFTR expression. *Am J Respir and Crit Care Med* Vol. 161(3):A23, 2000

Zhu S, Ware LB, Geiser T, Matthay M and **Matalon S**. Identification of nitrated surfactant protein a (SP-A) in pulmonary edema fluid from acute lung injury patients. *Am J Respir and Crit Care Med* Vol. 161(3):A217, 2000

Davis IC, **Matalon S** and Fultz PN. A possible role for reactive nitrogen species in the pathogenesis of acute lethal disease induced by SIV-PBj14. *Presented at the 18th Annual Symposium on Nonhuman Primate Models for AIDS*, Madison, WI, 2000

Myles C, Zhang M, Kappes JC, Sorscher E and **Matalon S.** Augmentation of adenovirus and lentivirus mediated gene transfer in lungs and epithelial cells by EGTA. *Pediatric Pulmonology,* Sup. 20, 240: p 240, 2000

Venglarik C, Bebok Z, Chen L and **Matalon S.** Improved cellular oxygenation increases CFTR Maturation and cell surface expression in a model cell line and primary cultures of mouse tracheal epithelial cells. *Pediatric Pulmonology,* Sup. 20, 57: p186, 2000

Hardiman K, Lindsey R and **Matalon S.** Modulation of active NA+ transport by nitric oxide. *Pediatric Pulmonology,* Sup. 20, 110: p 202, 2000

Bebok Z, Hicks JK, Sorscher E and **Matalon S.** Modulation of CFTR expression by nitric oxide. *Pediatric Pulmonology,* Sup. 20, 40: p 181, 2000

Nielsen, VG; Baird, MS; **Matalon, S.** The Nitric Oxide donor detanonoate does not decrease alveolar fluid clearance in rabbits. *Anesthesiology* 91 (3A); U199-U199 Art No. A281 Suppl. S 1999

Thorne, UH; Chen, L; Carlo, WA; **Matalon, S.** *Pediatric Research* 45 (4): 356A-356A Art No. 2103 Part 2 1999

Lazrak A, Samanta A and **Matalon S**. Biophysical properties of amiloride sensitive sodium (Na+) channel in a human lung epithelial cell line A549.*Am J Respir and Crit Care Med* Vol 159(3):A290, 1999.

Hickman-Davis JM, Gibbs-Erwin J, Lindsey JR, and **Matalon S**. Surfactant protein A mediates mycoplasmacidal activity of alveolar macrophages by production of peroxynitrite. *Am J Respir and Crit Care Med* Vol. 159(3):A506, 1999.

DuVall MD, Chen L, and **Matalon S**. Characterization of apical plasma membrane Cl- conductive pathways in rat fetal distal lung epithelial cells. *Am J Respir and Crit Care Med* Vol. 159(3):A467, 1999.

Zhu S, Geiser T, Ware LB, Matthay MA, and **Matalon S**. Nitrate levels are elevated in the pulmonary edema fluid and plasma of patients with acute lung injury. *Am J Respir and Crit Care Med* Vol. 159(3):A592, 1999.

Basiouny KF, Zhu S, and **Matalon S**.Peroxynitrite-induced human surfactant protein A nitration is enhanced by bicarbonate. *Am J Respir and Crit Care Med* Vol. 159(3):A883, 1999.

Sittiput C, **Matalon S**, Steinberg KP, Ruzinski JR, Goodman RB, Hudson LD, and Martin TR. Increased levels of nitrosylated protein in BALF from patients with acute respiratory distress syndrome (ARDS). *Am J Respir and Crit Care Med* Vol. 159(3):A377, 1999.

Jayr C, Wang Y, Folkesson HG, Lazrak A, **Matalon S**, and Matthay MA. Mechanisms responsible for TNF. *Am J Respir and Crit Care Med* Vol. 159(3):A292, 1999.

Samanta A, Lazrak A, Jackson R, Myles C, and **Matalon S**. Differential regulation of epithelial Na+ channel (EnaC) genes by dexamethasone in alveolar type II (ATII) cells. *FASEB J* 13(5):A789, 1999.

Lazrak A, Samanta A, and **Matalon S**. Dexamethasone control of expression of Na+ amiloride sensitive channel in A549 cells. *FASEB J* 13(4):A459, 1999.

Kagan E, Tanaka S, Choe N, Hemenway DR, and **Matalon S**. Asbestos inhalation induces nitrotyrosine formation in the pleura and paranchyma of rat lungs. *Am J Respir and Crit Care Med* 157(3):A377, 1998.

Jilling T, Haddad IY, Cheng SH and **Matalon S**. Nitric oxide (NO) inhibits heterologous CFTR expression. *Am J Respir and Crit Care Med* 157(3):A481, 1998.

Zhu S, Sampson JB, Haddad IY, Basiouny KF, Crow JP and **Matalon S**. Inhibition of human surfactant apoprotein A function by hypochlorous acid and its reaction products with nitrite. *Am J Respir and Crit Care Med* 157(3):A560, 1998.

Sittipunt C, Steinberg KP, **Matalon S**, Ruzinski JR, Goodman RB, Hudson LD and Martin TR. Increased levels of nitric oxide end products (nitrate and nitrite) in BALF from patients with acute respiratory distress syndrome. *Am J Respir and Crit Care Med* 157(3):A682, 1998.

Nielsen VG, Guo Y, Baird MS and **Matalon S**. Cyclic AMP-dependent regulation of Na transport across the alveolar epithelium in rabbits. *Am J Respir and Crit Care Med* 157(3):A848, 1998.

Hickman-Davis JM, Gibbs-Erwin J, Lindsey JR and **Matalon S**. Mechanisms of mycoplasmal killing by alveolar macrophages in vitro. *Faseb J* 12(5):A953, 1998.

DuVall MD, Guo Y and **Matalon S**. Regulation of ion transport across rabbit alveolar type II (ATII) cells by cAMP. *Faseb J* 12(4):A39, 1998.

Zhu S, Basiouny KF, and **Matalon S**. Bicarbonate enhancement of peroxynitrite-mediated nitration of surfactant protein A. *Free Radical Biol and Med 25(1):S70 (197),* 1998.

Patel RP, **Matalon S**, and Darley-Usmar VM. Snitrosation of hemoglobin: Effects on O2 delivery and antioxidant properties. *Free Radical Biol and Med 25(1):S17 (18),* 1998.

Jackson R, Ohman T, Helton E, Crow JP, Viera L, Alexander CB and **Matalon S**. Epithelial lining fluid (ELF) and lung protein nitration in lung allotransplants. *Free Radical Biol and Med 25(1):S62 (164),* 1998.

Haddad IY and **Matalon S**. The role of reactive oxygen nitrogen species during adenovirus mediated gene transfer in A549 cells. *Am J Respir and Crit Care Med* 155(4):A194, 1997.

Guo Y, DuVall MD, Crow JP, and **Matalon S**. Nitric oxide inhibits active transepithelial sodium absorption across cultured rat alveolar type II cell monolayers. *Am J Respir and Crit Care Med* 155(4):A831, 1997.

Zhu S, Kachel D, Martin WJ II, and **Matalon S**. Nitration of human surfactant protein A (SP-A) decreases its binding to *pneumocystis carinii*. *Am J Respir and Crit Care Med* 155(4):A826, 1997.

Hickman-Davis J, Lindsey JR, and **Matalon S**. Surfactant protein A mediates killing of mycoplasmas by activated alveolar macrophages in vitro. *Am J Respir and Crit Care Med* 155(4):A826, 1997.

Manuel SM and **Matalon S**. Nitric oxide (NO) protects calf lung surfactant extract (CLSE) from damage by peroxynitrite (ONOO). *Am J Respir and Crit Care Med* 155(4):A219, 1997.

Janssen YMW, **Matalon S**, and Mossman BT. Differential activation of NF-KB in rat lung epithelial cells by reactive oxygen and nitrogen species. *Am J Respir and Crit Care Med* 155(4):A206, 1997.

Borron P, Crouch E, McCormack FX, **Matalon S**, Lewis JF, Possmayer F, and Fraher LJ. Recombinant rat SP-D inhibits human T-lymphocyte proliferation in a manner comparable to recombinant rat, native human and native bovine SP-A. *Am J Respir and Crit Care Med* *155(4):*A805, 1997.

DuVall MD, Crow JP, Fuller CM, and **Matalon S**. Peroxynitrite (ONOO-) inhibits Na+ channel activity in *Xenopus* oocytes expressing α, β, γ-rENaC. *Faseb J* 11(3):*A248*, 1997.

Manuel SM, Guo Y, and **Matalon S**. Enhanced adenoviral transfection of the pulmonary epithelium by Exosurf(R). *Faseb J* 11(3):A557, 1997.

Guo Y, DuVall M, and **Matalon S**. Peroxynitrite and nitric oxide inhibit amiloride-sensitive Na+ transport in rat alveolar type II cells. *Faseb J* 11(3):A533, 1997.

Jilling T, Haddad IY, Sorscher EJ, Cheng SH, and **Matalon S**. Nitric oxide-dependent inhibition of heterologous CFTR Expression. *Pediatric Pulmonology* (14):A407.

Basiouny K, DuVall MD, and **Matalon S**. Hydrogen peroxide enhances the cAMP induced chloride conductance in *Xenopus* oocytes expressing CFTR. *Pediatric Pulmonology* (14):A121, 1997.

Manuel SM, Guo Y, and **Matalon S**. Enhanced adenoviral transfection of the pulmonary epithelium by Exosurf. *Pediatric Pulmonology* (14):A183, 1997.

DuVall MD, Guo Y, and **Matalon S**. Prolonged exposure to H2O2 inhibits active ion transport across T84 cells. *FASEB J* 10(3): A124, 1996.

Yue G, and **Matalon S**. Sublethal hyperoxia increase lung fluid clearance in rats. *FASEB J* 10(3):A349, 1996.

Zhu S, Haddad IY, and **Matalon S**. Nitration of surfactant protein A (SP-A) results in decreased mannose-binding ability. *Am J Respir and Crit Care Med* Vol 153(4):A103, 1996.

Haddad IY, Garver Jr R, Sorchser EJ, Tzeng E, and **Matalon S**. Decreased efficiency of adenovirus-mediated gene transfer by nitric oxide. *Am J Respir and Crit Care Med* Vol 153(4):A109, 1996.

Parrish G, Helton S, Ho Y-S, **Matalon S**, and Jackson R. Hypoxic regulation of MnSOD mRNA and protein expression in alveolar type II (ATII) epithelial cells. *Am J Respir and Crit Care Med* Vol 153(4):A175, 1996.

Johnson C, Myles C, **Matalon S**, and Jackson R. Na+-K+-ATPase subunit mRNA expression in rat lung during adaptive and lethal hyperoxia. *Am J Respir and Crit Care Med* Vol 153(4): A, 1996.

Janssen Y-MW, Timblin CR, Pache J-C, **Matalon S,** and Mossman BT. Increases in *c-fos* and *c-jun* mRNAlevels in rat lung epithelial cells exposed to peroxynitrite or hydrogen peroxide precede alterations in cell cycle distribution and apoptosis. *Am J Respir and Crit Care Med* Vol 153(4):A739, 1996.

Haddad IY, Garver R, Jr., Sorscher EJ, Tzeng E, and **Matalon S**. Decreased efficiency of adenovirus-mediated gene transfer by nitric oxide. 87 *American Oil Chemists Society,* session (36):60, 1996.

Jilling T, Haddad IY, Sorscher EJ, Kirk KL, and **Matalon S**. Exogenous .NO inhibits the heterologous expression of CFTR in LLCPK1 cells. *Pediatric Pulmonology* (13) A69, 1996.

Haddad IY, Sorscher EJ, Garver RI, and **Matalon S**. Mechanisms of nitric oxide-mediated suppression of gene transfer *in vitro*. *Pediatric Pulmonology* (13) A170, 1996

Haddad IY, Zhu S, Hu P, and **Matalon S**. Nitration of surfactant protein A (SP-A) results in decreased protein function. *FASEB J* 9(3):A414, 1995.

Russell JW, Yue G, Benos DJ, Jackson RM, Olman MJ, and **Matalon S**. Sublethal hyperoxia increases expression of arENaC in alveolar type II (ATII) cells. *FASEB J* 9(4):A859, 1995.

Pataki Gy, Czopf L, Holm BA, and **Matalon S**. Alterations in alveolar distribution and uptake of exosurf7 instilled intratracheally to animals exposed to hyperoxia. *FASEB J* 9(4):A859, 1995.

Robbins CG, Horowitz S, Sahgal N, Amirkhanian J. Meritt TA, **Matalon S**, Kazzaz J, Davis JM. surfactant inhibition and peroxynitrite (ONOO.) formation in newborn piglets treated with inhaled nitric oxide (NO) and oxygen (O2). *Am J Respir and Crit Care Med* Vol. 151(4):A23, 1995.

Nieves B, Carlo WA, Freeman BA, and **Matalon S**. Interaction of antioxidant enzymes with clinical surfactants. *Am J Respir and Crit Care Med* Vol.151 (4):A24, 1995.

Nieves B, Ruiz J, Cifuentes J, Carlo WA, Freeman BA and **Matalon S**. Superoxide dismutase inhibition of clinical surfactant function is reverted by SP-A. *Am J Respir and Crit Care Med* Vol. 151(4) A: 310, 1995.

Haddad IY, Barefield E, Wilson C, Cifuentes J, Zhu S, Hu P, and **Matalon S**. Effects of Nitric oxide on alveolar type II cell ATP and lipid synthesis. *Am J Respir and Crit Care Med* Vol. 151(4):A647, 1995.

Haddad IY, Hu P, and **Matalon S**. Increased production of nitric oxide during exposure of rats of hyperoxia *in vivo*. *Am J Respir and Crit Care Med* Vol 151(4):A757, 1995.

DuVall MD, Fuller CM, Sorscher EJ, and **Matalon S.**  TNF *Pediatric Pulmonology* (12):A80, 1995.

Haddad IY, Bebok Z, Hong J, Sorscher EJ, and **Matalon S.** Induction and toxicity of nitric oxide-derived species during adenovirus-mediated gene transfer. *Pediatric Pulmonology* (12):A342, 1995.

Gue Y, DuVall DM, and **Matalon, S.** H2O2 inhibits the active ion transport across human colonic T84 cells. *Oxygen '95*, 2-51:82, 1995.

Zhu S, Haddad IY, Hu P and **Matalon S.** Functional impairment of human surfactant protein A (SP-A) following nitration. *Oxygen '95*, 3-114:133, 1995.

Haddad IY, Crow JP, Beckman JS, **Matalon S.** Peroxynitrite not nitric oxide or superoxide injures surfactant protein A. *Crit Care Med* 22:A195, 1994.

Senyk O, **Matalon S,** Torin D, O'Brodovich H, and Benos D. Immunopurification and reconstitution of amiloride sensitive Na+ channels from adult rabbit lung into planar lipid bilayers using anti-γrENaC antibodies. *FASEB J* 8(4):A294, 1994.

Yue G, and **Matalon S.** Single Channel Na+ currents in alveolar type II (ATII) cells from normal and oxygen-adapted rats. *FASEB J* 8(5):A665, 1994.

Jackson R, Yue G, Russell W, Benos D, and **Matalon S.** Expression of epithelial sodium channel (γrENaC) in normal and hyperoxic rat lung. *FASEB J* 8(5):A799, 1994.

Haddad I, Hu P, Ye Y, Galliani C, Beckman J, and **Matalon S.** Detection of nitrotyrosine in patients with the adult respiratory distress syndrome (ARDS). *FASEB J* 8(5):A896, 1994.

**Matalon S**, Cheng S, and Schüch S. Peroxynitrite (ONOO.) inhibits surface properties of calf lung surfactant extract (CLSE) in the absence of iron. *FASEB J* 8(5):A897, 1994.

Pataki G, Czopf L, Jilling T, Marczin N and **Matalon S.** Fluid-phase endocytosis in alveolar macrophages is inhibited by cAMP and 3-isobutyl-1-methyl-xanthine. *Am J Respir and Crit Care Med* Vol.149 (4):A62, 1994.

Russell W, **Matalon S**, and Jackson R. MnSOD expression in alveolar epithelial cells isolated from hypoxic and hypoperfused lungs. *Am J Respir and Crit Care Med* Vol. 149(4):A459, 1994.

Haddad IY, Crow JP, Yaozu Y, Beckman J, and **Matalon S.** Concurrent generation of nitric oxide and superoxide damages surfactant protein A (SP-A). *Am J Respir and Crit Care Med* Vol. 149(4): A549, 1994.

Senyk O, **Matalon S**, Ismailov I, and Benos D. Purification and reconstitution of amiloride sensitive epithelial Na+ channels from adult mammalian lung into planar lipid bilayers. *Am J Respir and Crit Care Med* Vol. 149(4):A590, 1994.

Logan J, DuVall M, Bebok Z, Dong J, Howard M, Myles C, Peng S, Wheeler C, Felgner P, Frizzell R, **Matalon S**, and Sorscher E. *In vivo* and *in vitro* gene transfer to mammalian respiratory epithelium mediated by cationic liposomes. *Am J Respir and Crit Care Med* Vol. 149(4):A674, 1994.

Cifuentes J, Haddad I, Nieves B, Carlo W, and **Matalon S.** Antioxidant properties of different surfactant preparations. *Pediatr Res* Vol. 35(4):A328, 1994.

Haddad I, Beckman JS, Garver RS, and **Matalon S**. Structural and functional alterations of surfactant protein A (SP-A) by peroxynitrite. *Chest* 105:84S, 1994

**Matalon S**, Hu P, Ischiropoulos H, and Beckman JS. Peroxynitrite inhibition of oxygen consumption and ion transport in alveolar type II (ATII) pneumocytes. *Chest* 105:74S, 1994

Parks DA, Weinbroum A, Nielsen VG, Gelman S, and **Matalon S**. Increased lung permeability after liver ischemia: Novel rat model of multiple organ dysfunction. International *Anesthesia Research Society,* 67th Congress, 1993.

**Matalon S**, Myles C, Ischiropoulos H, Haddad I, Beckman JS, and Holm BA. Peroxynitrite inhibition of surface activity of surfactant mixtures. *Am Rev Respir Dis* 147(4):A930, 1993.

Haddad IY, Goldsmith KT, Garver RI, Jr, and **Matalon S**. Inhibition of surfactant protein A function by reactive nitrogen species. *Am Rev Respir Dis* 147(4):A985, 1993.

Nieves-Cruz B, Briscoe P, Caniggia I, Gutierrez H, **Matalon S**, Tanswell AK, and Freeman B. Use of surfactant replacement therapy preparations for the pulmonary delivery of antioxidant enzymes. *Am Rev Respir Dis* 147(4):A146, 1993.

Nielsen VG, Weinbroum A, Samuelson P, **Matalon S**, Gelman S, Tan S, Baldwin S, and Parks DA. Characterization of lung injury after thoracic aorta occlusion by lactate dehydrogenase release in bronchoalveolar lavage. *Am Rev Respir Dis* 147(4):A929, 1993.

Weinbroum A, Nielsen VG, Tan S, **Matalon S**, Baldwin S, Gelman S, and Parks DA. Increased pulmonary capillary permeability following liver ischemia-reperfusion: Role of circulating xanthine oxidase. *Am Rev Respir Dis* 147(4):A364, 1993.

Russell W, McKellar C, **Matalon S**, and Jackson R. Effects of severe hypoxia on expression of MnSOD mRNA in alveolar epithelium. *Am Rev Respir Dis* 147(4):A205, 1993.

Holm BA, Hlavaty L, Haddad IY and **Matalon S**. Increased pH decreases the ability of CLSE to restore lung mechanics in surfactant-deficient lungs. *Am Rev Respir Dis* 147(4):A989, 1993.

**Matalon S**, Bauer ML, Benos DJ, Kleyman TR, Lin C, and O'Brodovich H. Fetal lung epithelial cells contain two populations of amiloride-sensitive Na+ channels. *FASEB J* 7(3):A435, 1993.

Yue G, Haskell JF, Shoemaker R, and **Matalon S**. Regulation of Na+ channels in cultured alveolar type II cells: Role of cAMP. *FASEB J* 7(3):A435, 1993.

Haskell JF, Yue G, Czopf L, Benos DJ, and **Matalon S**. Upregulation of Na+ conductive proteins in alveolar type II (ATII) cells following exposure to sublethal hyperoxia. *FASEB J* 7(3):A218, 1993.

Czopf L, Pataki GY, Holm BA, and **Matalon S**. Quantification of alveolar distribution of intratracheally instilled surfactant mixtures. *FASEB J* 7(3):A499, 1993.

Pataki GY, Czopf L, Jackson CE, Jilling T, and **Matalon S**. Fluid phase endocytosis of dextrans by alveolar macrophages. *FASEB J* 7(3):A436, 1993.

Nielsen VG, Samuelson PN, Gelman S, Weinbroum A, Tan S, Baldwin S, **Matalon S**, and Parks DA. Hespan decreases pulmonary injury following descending thoracic aorta occlusion and reperfusion. *Syllabus of the 15th Annual Meeting of the Society of Cardiovascular Anesthesiologists*, pp. 285, 1993.

Nielsen VG, Samuelson PN, Gelman S, Weinbroum A, Tan S, Baldwin S, **Matalon S**, and Parks DA. Halothane increases myocardial and pulmonary injury following descending thoracic aorta occlusion and reperfusion. *Syllabus of the 15th Annual Meeting of the Society of Cardiovascular Anesthesiologists,* pp.281, 1993.

**Matalon S**, Hu P, and Beckman J. Inhibition of Na+ uptake in alveolar type II cells by reactive oxygen species and peroxynitrite. *The Toxicologist* 13(1):637, 1993.

Nielsen VG, Weinbroum A, Samuelson PN, Gelman S, Tan S, Baldwin S, **Matalon S**, and Parks DA. Hetastarch decreases lung injury after descending thoracic aorta occlusion and reperfusion in rabbits. *Anesthesiology* 79(3A):A575, 1993.

Logan J, DuVall M, Bebok Z, Wheeler CJ, Dong J-Y, Myles C, Peng S, Felgner PL, Frizzell RA, **Matalon S**, and Sorscher EJ. Cationic lipid mediated gene transfer to mammalian respiratory epithelium*. North American Cystic Fibrosis Conference*, Dallas, TX, 1993.

**Matalon S**, Baker RR, Czopf L, Jilling T, Barnard M, Freeman BA, and Kirk KL. Distribution of liposome-entrapped antioxidant enzymes in lung cells. *North American Cystic Fibrosis Conference*, Dallas, TX, 1993.

Yue G, Hu P, Oh Y, Jilling T, Benos DJ, Shoemaker RL, and **Matalon S**. Evidence for the existence of low amiloride affinity-type Na+ channels in freshly isolated and cultured alveolar type II cells. *XXXII International Congress of Physiological Sciences*, Glasgow,1993.

Yue G, **Matalon S** and Jackson, R. Sodium (Na+) channel expression in rat lung during adaptive and lethal hyperoxia. *Southern Society for Clinical Investigation*, New Orleans, Louisiana, 1993.

Russell W, Ho Y-S and **Matalon S**. Effects of hypoxia on lung MnSOD expression. *Southern Society for Clinical Investigation*, New Orleans, Louisiana, 1993.

Russell W, **Matalon S** and Jackson R. MnSOD expression in alveolar epithelial cells isolated from hypoxic and hypoperfused lungs. *Southern Society for Clinical Investigation*, New Orleans, Louisiana, 1993.

Haddad I, Beckman JS, Garver R and **Matalon S**. Proxynitrite injury to surfactant protein A (SP-A). *Free Radic Biol Med 15:501, 1993.*

Royall JA and **Matalon S**. Macrophages protect endothelial cells from hydrogen peroxide toxicity. *Am Rev Respir Dis* 145(4):A576, 1992.

Nielson V, **Matalon S**, Holm BA, and Gelman S. Pulmonary injury after ischemia-reperfusion by crossclamping of the thoracic aorta in rabbits. *Anesth Analg* 74:S220, 1992.

Hu P, Zhu L, Ischiropoulos H, and **Matalon S**. Peroxynitrite inhibition of oxygen consumption and ion transport alveolar type II (ATII) pneumocytes. *Am Rev Respir Dis* 145(4):A568, 1992.

Hu P, Yue G, Benos D, Shoemaker R, and **Matalon S**. Characterization of Na+ conductive pathways in alveolar type II (ATII) cells. *Am Rev Respir Dis* 145(4):A367, 1992.

Yue G, Shoemaker RL, Benos DJ, and **Matalon S**. Patch clamp characterization of Na+ currents (INa) on cultured rat alveolar type II (ATII) cells. *Am Rev Respir Dis* 145(4):A365, 1992.

Czopf L, Myles CT, and **Matalon S**. Fluorescent labelling does not affect the minimum surface tension of surfactant mixtures. *FASEB J* 6(4):A1269, 1992.

Oh Y, **Matalon S**, Kleyman TR, and Benos DJ. Biochemical characterization of a low affinity benzamil binding site in adult rabbit alveolar type II (ATII) pneumocytes. *FASEB J* 6(4):A1491, 1992.

Novotny WE, Holm BA, and **Matalon S**. The effect of oxygen toxicity on *in vivo*  clearance of exogenous surfactant in the adult rabbit. *Critical Care Medicine* 20(4):S92, 1992.

**Matalon S**, Benos DJ, O'Brodovich H. Amiloride sensitive Na+ conductance in membrane vesicles of fetal alveolar type II pneumocytes. *Am Rev Respir Dis* 143:A303, 1991.

Hu P, Oh Y, Jilling T, Benos DJ and **Matalon S**. Immunofluorescent localization of sodium conductance in cultured rat alveolar type II pneumocytes (ATII). *Am Rev Respir Dis* 143:A208, 1991.

Baker RR, Jilling T, **Matalon S**, and Kirk KL. Nonuniform alveolar uptake of liposome- encapsulated CuZn superoxide dismutase and catalase. *Am Rev Respir Dis* 143:A303, 1991.

Holm BA, Keicher L, Hudak BB, Baker RR, and **Matalon S**. Mechanisms of H2O2- mediated injury to type II pneumocyte surfactant metabolism and protection with PEG- Catalase. *Am Rev Respir Dis* 143:A741, 1991.

Easterling L, **Matalon S**. Do alveolar macrophages diminish oxidant injury to the alveolar epithelium? *Fourth Panamerican and Iberic Congress on Intensive and Critical Care Medicine*, Rio de Janeiro, Brazil, May 5-10, 1991.

Oh Y, Hu P, Kleyman TR, Saccomani G, **Matalon S**, and Benos DJ. Evidence for the presence of an amiloride binding protein in adult alveolar type II (ATII) pneumocytes. *FASEB J* 5(4):A690, 1991.

Bauer ML, Bridges RJ, Beckman JS and **Matalon S**. Apical membrane sodium (Na+) channels are inhibited by peroxynitrite (ONOO-), but not by oxygen radicals. *FASEB J* 5(4):A888, 1991).

Nielsen V, Koves T, **Matalon S** and Gelman S. Lung injury after ischemia-reperfusion by thoracic aorta crossclamping. *FASEB J* 5(5):A1270, 1991.

Easterling L, Nielsen V, and **Matalon S**. A contrast of lung injury after transtracheal instillation of normal saline and buffered solutions. *FASEB J* 5(5):A1397, 1991

Baker RR, Kirk KL, Freeman BA, and **Matalon S.** Uptake of liposome-encapsulated SOD and catalase by type II pneumocytes.  *FASEB J*. 4(3):A842, 1990.

Easterling L, Slater M, Baker R, and **Matalon S.** Scavenging of hydrogen peroxide by alveolar type II pneumocytes (ATII) and macrophages (MAC). *FASEB J* 4(3):A842, 1990.

Perry ML, Baker RR, and **Matalon S.** Intratracheal instillation of liposome-encapsulated superoxide dismutase (SOD) and catalase (CAT) protects rabbit pulmonary endothelium from reactive oxygen species (ROS). *FASEB J*. 4(4):A971, 1990.

Bubien J, Benos D, and **Matalon S**. Identification of amiloride-inhibitable sodium currents across freshly-isolated alveolar type II pneumocytes. *Am Rev Respir Dis* 141:A636, 1990.

Baker RR, Panus PC, **Matalon S**, and Freeman BA. O2 metabolites from intracellular xanthine oxidase inhibit surfactant metabolism. *Am Rev Respir Dis* 141:536, 1990.

**Matalon S**, Bridges RJ, and Benos DJ. Na+ uptake into alveolar type II membrane vesicles occurs through amiloride-inhibitable Na+ channels. *Am Rev Respir Dis* 141:A636, 1990.

Holm BA, Stapanowich CEB, **Matalon S**, and Finkelstein, JN. Hyperoxic lung injury decreases surfactant clearance. *Am Rev Respir Dis* 141:A539, 1990.

Bauer ML, Bridges RJ, Beckman JS, and **Matalon S**. Peroxynitrite (ONOO-) inhibits sodium (Na+) uptake into colonic enterocyte membrane vesicles. *Free Radical Biology and Medicine* 9(1):83, 1990.

Barnard ML, **Matalon S**. Scavenging of hydrogen peroxide by isolated perfused rabbit lungs. *Free Radical Biology and Medicine* 9(1):129, 1990.

Baker RR, Holm BA, Engstrom PC, and **Matalon S.** Extracellular and intracellular oxygen radicals decrease surfactant production *in vitro*. *FASEB J* 3(3):A536, 1989.

**Matalon S**, Bridges RJ, and Benos DJ. Characterization of Na+ uptake by lung epithelial cells. *Am Rev Respir Dis* 139(4):A580, 1989.

Engstrom PC, Burkhalter A, Baker R, and **Matalon S**. Alveolar type II pneumocytes scavenge hydrogen peroxide *in vitro*. *Am Rev Respir Dis* 139(4):A401, 1989.

Baker RR, Freeman BA, and **Matalon S**. Liposome-mediated augmentation of lung SOD and catalase activities by intratracheal instillation. *Am Rev Respir Dis* 139(4):A43, 1989.

Engstrom PC, Holm BA, and **Matalon S**. Surfactant replacement attenuates the increased alveolar epithelial permeability caused by hyperoxia. *Am Rev Respir Dis* 139(4):A400, 1989.

Holm BA, Cavanaugh C, Baker RR, and **Matalon S**. Effect of reactive O2 metabolites on type II surfactant synthesis. *Am Rev Respir Dis* 139(4):A403, 1989.

Holm BA, Tonucci D, and **Matalon S.** Clearance of exogenous surfactant in hyperoxic lung injury. *FASEB J* 3(3):A546, 1989.

Engstrom PC, Burkhalter A, Baker R, and **Matalon S**. Consumption of hydrogen peroxide by alveolar type II pneumocytes *in vitro*. *Pediatric Research* 1989.

Engstrom PC, Burkhalter A, Baker R, and **Matalon S**. Hydrogen peroxide scavenging ability of type II pneumocytes. *Clinical Research* 1989.

Engstrom PC, Holm BA, and **Matalon SV**. Effect of surfactant replacement on alveolar permeability. *Clinical Research* 1989.

**Matalon S**, Kirk K, and Benos DJ. Immunofluorescent localization of Na+ channel protein in type II pneumocytes. *The Journal of Cell Biology* 109(4):130a, 1989.

**Matalon S,** Holm BA, Baker RR, Freeman BA. Antioxidant properties of surfactant replacement mixtures. *Am Rev Respir Dis* 137:80, 1988.

**Matalon S,** Freeman BA, Beckman JS, Duffey ME. Oxidant-induced changes on active sodium transport *in vitro*. *Am Rev Respir Dis* 137:220, 1988.

Baker RR, Holm BA, Panus PC, **Matalon S.** The putative role of surfactant in adaptation to hyperoxia. *FASEB Journal* 2:A1183, 1988.

Holm BA, Baker RR and **Matalon S**. Oxidant-Induced changes in type II pneumocyte phospholipid synthesis. *Basic Research on Lung Surfactant* 60, 1988.

**Matalon S**, Baker RR, Freeman BA, Holm BA. Catalase and superoxide dismutase-type activities in lung surfactant. *Basic Research on Lung Surfactant* 51, 1988.

Baker RR, Holm BA, Panus PC, and **Matalon S**. Mechanisms of oxygen adaptation in rabbits. *Presented at the Second Biannual Meeting of Free Radicals in Biology and Medicine: Ischemia/Reperfusion,* Point Clear, AL, March 7-9, 1988.

Baker RR, Holm BA, and **Matalon S.** Physiological and biochemical characterization of oxygen tolerance in rabbits. *Fed Proc* 46:3945, 1987.

Panus PC, Beckman JS, **Matalon S,** and Freeman BA. Detection of xanthine dehydrogenase/oxidase in pulmonary alveolar type II epithelial cells. *Fed Proc* 46:2897, 1987.

Holm BA, Notter RH, Finkelstein JN, and **Matalon S.** Changes in type II pneumocytes during injury and recovery from hyperoxia. *Am Rev Respir Dis* 135:A15, 1987.

Loewen G, Milanowski L, Holm BA, Notter RH, and **Matalon S.** Modification of pulmonary hyperoxic injury in rabbits by instillation of calf lung surfactant extract. *Am Rev Respir Dis* 135:A16, 1987.

Holm BA, Notter RH, Leary JF, and **Matalon S.** Lung biochemical and physiological changes after three weeks in 60% O2. *Am Rev Respir Dis* 133:A109, 1986.

**Matalon S,** Holm BA, and Notter RH. Effects of surfactant replacement on hyperoxic- induced injury in rabbit lungs. *Am Rev Respir Dis* 133:A109, 1986.

**Matalon S** and Krasney JA. Loss of hypoxic pulmonary vasoconstriction following exposure to hyperoxia. *Physiologist* 28:347, 1985.

Laughlin MJ, Wild L, Nickerson P, and **Matalon S.** Neutropenia does not diminish the hyperoxic injury to the alveolar epithelium. *Physiologist* 28:279, 1985.

Krasney JA, McDonald BW, Hajduczok G, and **Matalon S.** Peripheral circulatory response to chronic eucapnic hypoxia in conscious sheep. *Fed Proc* 43(3):295, 1984.

Holm B, Notter RH, and **Matalon S.** Changes in lung mechanics and bronchoalveolar lavage following exposure to 100% O2. *Fed Proc* 43(3):833, 1984.

**Matalon S** and Egan EA. Effects of 100% O2 breathing on albumin extravascular spaces and permeability surface area products. *Fed Proc* 43(3):885, 1984.

**Matalon S,** Harper W, and Olszowka J. The response of rabbits with acute and chronic lung disease to 100% O2. *Am Rev Respir Dis* 129:A276, 1984.

Krasney JA, McDonald BW, and **Matalon SV.** Regional blood flow (Qr) responses to chronic short-term arterial hypoxia in conscious sheep. *Fed Proc* 42(4):979, 1983.

**Matalon S,** Seigle JM, and Nickerson PA. Alveolar permeability during recovery from 100% O2. *Am Rev Respir Dis* 127(4):254, 1983.

**Matalon S,** Egan EA, Cerav M, and Farhi LE. Oxygen toxicity: Lung capillary permeability and edema precedes systemic hypoxemia. *Fed Proc* 41(5):1502, 1982.

Nesarajah MS, **Matalon S,** Krasney JA, and Farhi LE. Role of hyperventilation in the cardiovascular response to hypoxia of animals. *Fed Proc* 41(5):1686, 1982.

Nickerson PA, **Matalon S,** and Farhi LE. Recovery of lung following exposure of rabbits to 100% O2 at 1 ATA: An ultrastructural study using cytochrome c as a tracer. *Fed Proc* 41(4):940, 1982.

**Matalon S,** Nesarajah MS, Krasney J, and Farhi LE. Effects of acute hypercapnia on peripheral blood flow in conscious sheep. *Fed Proc* 40:594, 1981.

Nesarajah MS, **Matalon S,** Krasney J, and Farhi LE. Effects of acute hypoxemia on the distribution of cardiac output in conscious sheep. *Fed Proc* 40:594, 1981.

**Matalon S,** Nesarajah MS, and Farhi LE. Cardiac output and its regional distribution in normobaric hyperoxia. Accepted for presentation at the *Annual Meeting of the Undersea Medical Society*, Pacific Grove, California, May 1981.

**Matalon S** and Farhi LE. Ventilation-perfusion lines and gas exchange in liquid breathing - Theory. *Satellite Symposium of XXVIII International Congress of Physiological Science*, "Gas Exchange Function of Normal and Diseased Lung," Gottingen, West Germany, July 8- 11, 1980.

Nickerson P and **Matalon S.** The effects of breathing 100% O2 at 1 ATA on the movement of cytochrome c across the alveolar membrane--An ultrastructural study. *Fed Proc* 39:765, 1980.

**Matalon S,** McIntyre BR, and Egan EA. O2 exposure and permeability of the alveolar epithelium. *Fed Proc* 38:1264, 1979.

**Matalon S** and Farhi LE. Respiratory acidosis in conscious sheep breathing 100% O2 at 1 ATA. *Physiologist* 22:82, 1979.

Dashkoff N, **Matalon SV,** Klocke FJ, and Farhi LE. The effects of hyperventilation on the cardiac output of humans. *Fed Proc* 37:824, 1978.

**Matalon SV,** Dashkoff N, Klocke FJ, and Farhi LE. The effects of hyperventilation on the recirculation time of humans. *American Thoracic Society Annual Meeting*, Boston, May 14-17, 1978.

Boros SJ, **Matalon SV,** Ewald R, Leonard AS, and Hunt CE. The effects of changes in inspiratory: expiratory ratio and end-expiratory pressure in hyaline membrane disease: The significance of mean airway pressure. *Am Rev Respir Dis* 115:276, 1977.

Farhi LE and **Matalon SV,** The effects of passive changes in posture on the cardiorespiratory parameters of healthy human subjects. *Physiologist* 20:28, 1977.

**Matalon SV** and Farhi LE. Gas exchange in liquid breathing--Theory. *Physiologist* 20:61, 1977

**Matalon SV,** Eichorst BC, Manning P, Bernie BJ, Hunt CE, and Seeds AE. Continuous *in vivo* monitoring of arterial PO2 and PCO2 in fetal lambs. *Presented (SM) at the 23rd Annual Meeting Society for Gynecologic Investigation,* March 1976.

Hunt CE, **Matalon SV,** Ewald R, Thompson TR, and Lindsay WG. Successful treatment of sleep-dependent primary hypoventilation syndrome (Ondine's curse) with bilateral phrenic nerve pacing. *Presented at the Annual Meeting of the American Thoracic Society*, New Orleans, May 1976.

**Matalon S,** Wangensteen OD, Leonard AS, and Hunt CE. Development of mass spectrometer system for respiratory measurements in neonates. *J Assoc Adv Med Instrum,* Presented (SM) at the AAMI Meeting, March 19, 1975.

**Matalon S,** Leonard AS, and Hunt CE. Development of mass spectrometer system for continuous *in vivo* blood gas analysis. *Pediatr Res* 9(4):367, 1975.

**Matalon SV** and Wangensteen OD. Filtration and reflection coefficients and pore size in pulmonary capillaries of the newborn rabbit. *Physiologist* 18:309, 1975.

Hunt CE, **Matalon S,** Neal WA, Wangensteen OD, and Leonard AS. Cardiorespiratory responses to positive end-expiratory pressure (PEEP). *Presented (SM) at the American Academy of Pediatrics Meeting, Surgical Section*, October 1974.

**Matalon S,** Erickson J, Mosharrafa M, and Leonard AS. *In vitro* measurement of blood gas tensions with a mass spectrometer--A laboratory investigation. *J Assoc Adv Med Instrum* 7:66-67, 1973.

Hunt CE, **Matalon S,** Wangensteen OD, and Leonard AS. Continuous mass spectrometer analysis of ventilation-perfusion abnormalities in infants. *J Pediatr* 83:154, 1973.

Stauffer W, Buckley J, **Matalon S,** et al. A small dedicated computer system for clinical monitoring and data acquisition. *J Assoc Adv Med Instrum* 7:65, 1973.