

CURRICULUM VITAE
Sadis Matalon, Ph.D.
(October 24, 2008)

PERSONAL

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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

ACADEMIC POSITIONS

- 2008 – Present Director, Pulmonary Injury and Repair Center, School of Medicine,
University of Alabama at Birmingham
- 2007-Present Director of Research, Division of Critical Care and Perioperative
Medicine, University of Alabama at Birmingham, Birmingham, AL
- 2003-Present 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 Professor, 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 - Present	Professor of Pediatrics, University of Alabama at Birmingham, Birmingham, AL
1987 - Present	Professor of Physiology and Biophysics, University of Alabama at Birmingham, Birmingham, AL
1984 - 1987	Research Associate Professor of Pathology, State University of New York at Buffalo, Buffalo NY
1982 - 1987	Associate Professor of Physiology, 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, Department of Pediatrics and Physiology, Northwestern University and Children's Memorial Hospital, Chicago, IL

PROFESSIONAL ACTIVITIES

2008	Member, PPG Advisory Committee, Division of Pulmonary and Critical Care Medicine, Northwestern University, Chicago, IL, July 16-17, 2008
2008	Member, External Advisory Committee, Center for Lung Biology College of Medicine, University of South Alabama, Mobile, Alabama, June 11-13, 2008
2005-2008	Member, Advisory Research Committee, IMC University of Applied Sciences, Krems, Austria

- 2000 Director, NATO Advanced Study Institute – *Etiology and Treatment of Acute Lung Injury*
- 1997 Director, NATO Advanced Study Institute – *Adult Respiratory Distress Syndrome: From Bench to Bedside*
- 1997 – 2004 President, International Foundation for Biomedical Research, Inc, Birmingham, AL

PROFESSIONAL HONORS

- 2005 Keynote speaker, International Scientific Conference on “New Frontiers in Biomedicine and Biotechnology”, Danube University and IMC University of Applied Sciences, Krems, Austria
- 2004 Selected as the “Best Basic Science Professor” by the 2004 School of Medicine Class; recipient of the Caduceus award
- 2007 - Present Deputy Editor, American Journal of Respiratory Cell and Molecular Biology
- 2003 -2006 Associate Editor, American Journal of Respiratory Cell and Molecular Biology
- 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, 2000 Director, North Atlantic Treaty Organization Advanced Study Institute on Acute Lung Injury, Corfu, 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
1999, 2000 Nominated for the Best Basic Science Teacher Award, School 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- present)
- Member, Strategic Planning Committee (2006 – 2007)
- Member, ALA Research Grant Review Committee (2006 - present)
- 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 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-present)
 Member, Education Committee (1996-2003)
 Co-Chair, Critical Care Faculty Search Committee (2006-present)

INVITED LECTURES (1991-2009)

Invited speaker, European Respiratory Society Congress, Vienna, Austria, September 2009

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

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

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, Maryland, 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, 2007

Invited speaker, Physiological Genomics and Proteomics of Lung Disease, 2006 American Physiological Society Conference, November 2006

Invited speaker, Inspire Pharmaceuticals, Durham, North Carolina, May 2006

Invited speaker, International Symposium on Respiratory Diseases (ISRDR), 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 Panellenic 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, May 2005

Invited speaker and symposium chairman, Annual Meeting of the American Thoracic Society, 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, 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, European Respiratory Society Glasgow 2004 Congress, Glasgow, Scotland, "Pathogen-induced activation of human alveolar macrophages from lung transplant recipients", 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, April 2004

Invited speaker, Pan Hellenic Thoracic Society, December, 2003

Invited speaker; European Respiratory Society, Vienna, Austria, Symposium on "Redox signal transduction in the lung; basic and clinical implications"; title of talk: Redox regulation of ion channels in the lung'; October 2003

Invited speaker and symposium organizer, Cystic Fibrosis Foundation, Title of symposium: "Role of Redox Regulation of Microbicidal Activity"; title of talk: "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; Symposium on: Interactions of pathogens with respiratory epithelial cells: Mechanisms and physiological sequelae; American Thoracic Society Annual Meeting; Title of talk: "Inhibition of sodium transport across airway epithelial cells by respiratory syncytial virus: mechanisms and pathophysiological implications", May 2003

Invited speaker and organizer; Symposium on: "Regulation of Ion Channel Structure and Function by Reactive Oxygen Nitrogen Intermediates"; Annual Meeting of Experimental Biology, Title of talk: "Modulation of CFTR Structure and Function by Reactive Oxygen-Nitrogen Intermediates" 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 Outsider PhD Examiner, University of Vanderbilt, Nashville TN, February 2003

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

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

Visiting Professor, University of Louisville, Kossair Childrens Hospital, Louisville, Ky, August 2002

Invited speaker and member, organizing committee, Third International Meeting on Reactive Oxygen/Nitrogen Radicals and Cellular Injury, Morgentown, W. Virginia, June 2002

Visiting Professor, Northeastern Ohio University, School of Medicine, Department of Physiology, 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, 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, Session on Ion Transport, Experimental Biology, Orlando, Florida, April, 2001

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

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

Visiting professor, School of Public Health, Harvard University, 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, Department of Medicine, Emory University, Atlanta, GA, (Chairman of the External Advisory Committee on their Program Project on Alcohol and ARDS) September 2000

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

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

Invited speaker, symposium on "Gaseous molecules in the Lung", International Conference of the American Thoracic Society, 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 Depart.of Physics, St. Paul, MN, April 1999

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

Invited speaker, American Thoracic Society Postgraduate Course on Pathogenesis of lung injury at the molecular level, April 1999

Invited speaker, Experimental Biology '99 Minisymposium on Mechanisms of lung epithelial injury, April 1999

Invited speaker, Eli Lilly Research Laboratories, March 1999

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

Invited speaker, Harvard School of Public Health, 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, May 1998

Invited speaker, Experimental Biology '98, 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, Oaxaca, Mexico, "Nitric Oxide and Gene Transfer" November 1996

Naval Medical Research Institute, Bethesda, MD, "Role of Reactive Oxygen and Nitrogen Species in Acute Respiratory Failure" 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, Title of presentation: "Modulation of Gene Transfer by Nitric Oxide" Crete, Greece, July 1996.

Featured speaker, symposium on "Nitric Oxide and Airway Epithelium", annual meeting of the American Thoracic Society, New Orleans, LA, May 1996

Visiting Professor, University of California Davis, Center for Comparative Respiratory Disease, 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, symposium on "Lipid Carriers for Gene Therapy", American Oil Chemists' Society-International Lecithin & Phospholipid Society Division, Indianapolis, IN, April 1996

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

Invited speaker, symposium on "Antioxidant treatment in inflammatory diseases with emphasis on cystic fibrosis", Antimicrobial Therapy in Cystic Fibrosis Conference, 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" June 1995

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

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

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

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

Invited speaker, symposium on "Alveolar Epithelia Injury", Conference on Nasal and Pulmonary Drug Delivery, 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 at the "8th International Colloquium on Pulmonary Fibrosis", Dijon, France, October 1994

Invited speaker, symposium on "Nitric Oxide in Acute Lung Injury", American Thoracic Society, May 1994

Featured speaker, mini-symposium on "Nitric Oxide in Acute Lung Injury" American Thoracic Society, May 1994

Winthrop University Hospital, Cardiopulmonary Research Institute, Mineola, NY April 1994
Invited speaker, symposium on "Biology of Alveolar Epithelial Fluid and Solution Transport", FASEB, April 1994

Chairman, Minisymposium, Oxidant Lung Injury, FASEB, 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, March 1994

Invited speaker, University of California in San Diego, Department of Pediatrics, February 1994
Seventh Annual North American Cystic Fibrosis Conference; Symposium on Neutrophil-mediated Oxidant Injury to the Lung, October 1993

University of Minnesota, Department of Medicine, Division of Pulmonary Medicine, September 1993

Chaired Minisymposium on Antioxidant Delivery Systems, American Lung Association/American Thoracic Society International Conference, May 1993

University of Athens Medical School, Athens, Greece, April 1993

Children's Hospital, Penteli, Greece, April 1993

Society of Toxicology Meeting, March 1993

Co-chair ASIP Minisymposium on Pulmonary Pathobiology, Experimental Biology 93 Meeting, March 1993

University of Toronto and The Hospital for Sick Children, Toronto, Ontario, Canada January 1993

Burroughs Wellcome Company, Research Triangle Park, NC, November 1992

North Carolina State University, October 1992

Duke University Joint Program of Toxicology, Toxicology Scholar Seminar Series, October 1992

Forest Laboratories, New York, NY, April 1992

American Chemical Society Meeting, February 1992

Burroughs Wellcome Company, July 1991

North Carolina State University, July 1991

Duke University, July 1991

Conference on "Toxic Smoke Inhalation and Lung Injury", Department of the Navy, Naval Medical

Research Institute, National Naval Medical Center, Bethesda, MD, April 1991

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

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

STUDY SECTIONS and REVIEW COMMITTEES

Permanent member

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

Member of Scientific Advisors, The Francis Families 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, 2004-05)

Ad hoc-reviewer

Ad hoc Reviewer, NIH- CounterACT-U54 Study Section, 2006

Ad hoc Reviewer, NIH- CSR-LIRR Study Section, 2006

Ad hoc Reviewer, NIH- Lung Biology and Pathology Study Section, 2002

Ad hoc Reviewer, NIH- Lung Biology and Pathology Study Section, 1993

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

Ad hoc Reviewer, Department of Veteran's Affairs, 1996

Review Panels

Member Review Panel, FY09 Joint Science and Technology Office for Chemical and Biological Defense, Defense Threat Reduction Agency, 2008

Member Review Panel, National Institute on Alcohol Abuse and Alcoholism, 2007

Member, FY08 Medical Chemical and Biological Defense Science Review panel, in support of the Defense Threat Reduction Agency, 2007

Member, Special Emphasis Panel Review Committee, Discover Program National Institute of Health, National Institute of Environmental Health Services, 2007

Member, Special Emphasis for PPG review, National Institutes of Health, NHLBI, 2007

Member, Special Emphasis for PPG review, National Institutes of Health, NHLBI, 2006

Member, Special Emphasis Panel on Specialized Centers of Clinically Oriented Research (SCCOR), Peer reviewer, NHLBI, 2006

Member, Special Emphasis for PPG review, National Institutes of Health, NHLBI, 2005

Member, Special Emphasis for PPG review, National Institutes of Health, NHLBI, 2003

Member, Special Emphasis Panel on Specialized Centers of Clinically Oriented Research (SCCOR), National Institutes of Health, NHLBI, 2003

Member, Program Project Review Committee, NHLBI, 2002

External reviewer, Ohio Board of Regents, Incentive Fund Grants, 2002

Member Review Panel, Department of Defense (American Institute of Biological Sciences), 2002

Member, Special Emphasis Panel on Mentored Scientists Development Award, National Institutes of Health, 2002.

Chairman, Special Emphasis Panel, National Institutes of Health, 2001

External reviewer, National Cancer Institute, Site visit for the Laboratory of Chemical Carcinogenesis, 2001

Chairman, Physiology Special Emphasis Panel, National Institutes of Health, 2000

External reviewer, Canadian National System of Health, 2000

Member, Physiology Special Emphasis Panel, National Institutes of Health, 1999

Chairman, Physiology Special Emphasis Panel, National Institutes of Health, 1997, 1998

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

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

Consultant, NHLBI Special Review Committee, 1995

Consultant, NHLBI Reverse Site Visit, January 1993

Consultant, NHLBI Reverse Site Visit, February 1993

Consultant, NHLBI Special Review Committee, March 1993

Consultant, NHLBI Special Review Committee, May 1993

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

Consultant, NHLBI Specialized Centers of Research (SCORs), 1991

Consultant, NIHHLB Program Project Grant Review, University of Nebraska Medical Center, 1991

NIH HED Study Section, 1991

Pulmonary Study Section for Tobacco-Related Disease Research Program (TRDRP), 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 (1999-2003)

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

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 (2006-2008)

RESEARCH INTERESTS

Cellular and physiological sequelae of oxidant injury to epithelial cells and tissues; Interactions of viruses with ion channels; role of surfactant proteins in innate immunity

RESEARCH SUPPORT

Pending (as of July 18, 2008; Principal Investigator only)

Source/Number: 2R01HL031197-24 (NHLBI)

Title: Inhibition of ENaC and Lung Na⁺ Transport by Replicating Flu Virus
 Role on Project: Principal Investigator
 Dates and Costs: 09/01/08-07/31/2013
 Current status: Priority score:157; Percentile: 22.5% (revised application will be resubmitted November 2008)

Current

Source: 1U54ES017218-01 (NIEHS)
 Title: Novel Treatments of Chlorine Induced Lung Injury to the Cardiorespiratory Systems
 Type: Center of Excellence (U54)
 Dates and Costs: 09/01/08-08/31/2011; \$2,251,1521 (direct costs)
 Role: **Principal Investigator of the U54; Project leader: Project 1; Director of the Administrative Core**

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: 5U01ES015676-02 (NIEHS)
 Title: Prevention and Treatment of Chlorine Gas Induced Injury to the Pulmonary System
 Role on Project: **Principal Investigator**
 Dates and Costs: 09/30/2006 -05/31/2011; 2,097,004 (direct costs)

Source/Number: 5R01HL075540-04 (NHLBI)
 Title: Nitric oxide modulation of CFTR Expression and Function
 Role on Project: **Principal Investigator**
 Dates and Costs: 10/01/2004-11/30/2008; \$1,000,000 (direct costs)

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, \$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)

PAST RESEARCH SUPPORT (Principal Investigator Only)

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 novel P2Y 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: NIH 1R01-HL72871
 Title: Modulation of Innate Immunity in Lung Transplantation
 Role on Project: **Principal Investigator**
 Dates and Costs: 10/01/2002 – 07/31/2007; \$875,000 (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: NIH

Title: Regulation of lung epithelial sodium channels by cGMP
 Role on Project: **Co-Investigator; PI: Dr. Hong-long Ji**
 Dates and Costs: 02/01/2007-02/01/2012; \$1,000,000 (direct costs)

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

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 Ams
 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 the 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.
Dates 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
Charles A. Bosworth	2008-	Post-doctoral fellow
Andreas Bracher	2007- 2008	Visiting Scholar from IMC Univesity, Austria
Ahmed Lazrak, Dr. Sc.	2007 – Present	Research Associate
Weifeng Song, MD., PhD	2006 - Present	Research Associate

Devipriya Subramaniam	2007 – Present	Visiting Scholar from Lund University, Sweden
Kokilavani Vedagiri	2007 – Present	Post-doctoral fellow
Shipeng Wei	2007 – Present	Post-doctoral fellow
Lan Chen	1997 – Present	Research Assistant
Past Trainees	Training Period	Last Known Position
R. Randall Baker, PhD, RRT, RCPT (Graduate Student: PhD Biophysics)	1987-1992	Associate Prof. and Chairman of Respiratory Care and Anesthesiology, Medical College of Georgia, Augusta, GA
Michelle Barnard (Perry), PhD (Post-doctoral fellow)	1990-1992	Study Section Administrator, National Institutes of Health, Bethesda, MD
Martin L. Bauer, M.D. (Fellow in Pediatric Pulmonology)	1991-1993	Associate Professor of Pediatrics, Arkansas Children's Hospital, University of Arkansas for Medical Sciences, Little Rock AR
Zsuzanna Bebok, PhD (Research Assistant Prof.of Medicine)	2000-2002	Assistant Prof., Cell Biology (joint supervision with Dr. Eric Sorscher)
Javier Cifuentes, MD (Clinical Fellow in Neonatology)	1993-1995	Assist Professor of Pediatrics, Division of Neonatology, San Diego, Chile
Laszlo Czoph, MD (Post-doctoral fellow)	1992-1993	Assistant Professor of Internal Medicine, University Medical School, Pecs, Hungary
Ian C. Davis, DVM, PhD	1998-2006	Assistant Professor Department of Veterinary Medicine Ohio State University Columbus, OH
Michael Duvall, DVM., PhD (Post-doctoral fellow)	1995-1998	Research Scientist, CoVance Laboratories, Vienna VA
Paul C. Engstrom, MD (Clinical Fellow in Neonatology)	1988-1990	Private Practice in Newborn Medicine, Charlotte NC
Yi Guo, PhD	1994-1997	Research Associate, DuPont

(Post-doctoral fellow)		Hospital, Wilmington DE
Imad Y. Haddad, MD (Assistant Professor of Pediatrics)	1992-1997	Associate Professor, Department of Pediatrics, Division of Pulmonary and Critical Care, University of Minnesota, Minneapolis, MN
Nina G. Hall, PhD (Post-doctoral fellow)	2003-2005	Post-doctoral fellow, University of Alabama at Birmingham, Birmingham, AL
Karin Hardiman, MD, PhD (Graduate Student; Master's degree in Physiology, 2000; PhD 2003)	1999-2004	Surgical Resident, University of Oregon, Portland OR
Joyce F. Haskell, PhD (Post-doctoral fellow)	1992-1994	Research Associate, Department of Biochemistry, University of Alabama at Birmingham, Birmingham, AL
Judy Hickman-Davis, DVM, PhD (Graduate Student in Comparative Medicine; PhD 1998; Joint Supervision with Dr. R. Lindsey)	1998-1999	Assistant Professor of Veterinary Sciences and Staff Veterinarian Ohio State University Columbus, OH
Bruce A. Holm, PhD (Graduate Student in Toxicology; University of Rochester)	1983-1987	Prof. and Senior Assoc. Dean, School of Medicine, State University of New York at Buffalo; Univ. of Buffalo at Roswell Park Cancer Institute Assoc. Vice President of Scientific Affairs (Joint supervision With Dr. R. Notter)
Ping Hu, MD, RN (Post-doctoral fellow)	1991-1997	Nurse, Bone Marrow Transplant Unit, University of Alabama at Birmingham Hospital, Birmingham AL
Tamas Jilling, MD (Post-doctoral fellow)	1997-1998	Assistant Professor, Dept. of Pediatrics, Northwestern Medical School, (Evanston IL)
Laughlin Mary J., MD (Medical Student; Honor's thesis)	1983-1985	Assoc. Prof. of Medicine & Pathology, Director Allogeneic Transplantation Program, Case Western Reserve University, Cleveland OH
Ahmed Lazrak, Dr.Sc. (Post-doctoral fellow)	1997-2004	Instructor, Southwestern Medical Center, University of Texas, Dallas TX

Gregory M. Loewen, DO, FCCP (Clinical Fellow in Pulmonary Medicine)	1986-1988	Professor, Dept. of Medicine, Roswell Park Cancer Institute, Buffalo NY
Martin Leustik	2006-2007	Visiting Scholar, University of Krems, Austria
S. Mabelle Manuel, PhD (Post-doctoral fellow)	1996-1997	Director, Medical and Scientific Affairs, Sankyo Pharma Inc
L. Milanowski (Student; Nurse Anesthesia Program)	1986-1988	Nurse Anesthetist, University of Alabama at Birmingham, Birmingham AL
Sricharan Moturi M.D., M.P.H. (Post-doctoral fellow)	2003-2004	Resident, Dept. of Psychiatry & Behavioral Neurobiology
Vance Nielsen, MD (Assistant Professor of Anesthesiology)	1990-1991, 1998-2000	Professor of Anesthesiology, University of Alabama at Birmingham AL
Izabela Nita (Visiting Scholar)	2006-2007	Student, Lund University, Sweden
Philip O'Reilly, MD (Clinical Fellow in Pulmonary Medicine)	1999-2004	Research Instructor, Pulmonary, University of Alabama at Birmingham, Birmingham AL
Gyorgy Pataki, MD (Post-doctoral fellow)	1992-1994	Internist, Private Practice in Daly City CA
G. Alejandro F. Perez, MD (Post-doctoral fellow)	2005-2006	Postdoctoral Fellow, Anesthesiology University of Alabama at Birmingham
Lance Prince, MD (Post-doctoral fellow)	2003-2005	Assistant Professor of Pediatrics, University of Alabama at Birmingham, Birmingham AL
William J. Russell, PhD (Post-doctoral fellow)	1992-1993	Research Scientist, Veterans Administration Medical Center, Shreveport, LA
Arabinda Samanta, PhD (Research Assistant Prof.)	1997-1999	Research Assistant Professor, Dept. of Surgery, University of Alabama at Birmingham, Birmingham, AL

Alexander Swoboda	2006-2007	Visiting Scholar, University of Krems, Austria
Veronica Swystun, PhD (Post-graduate student in the Physiology and Biophysics PhD program; PhD 2005)	2001-2005	Postdoctoral Fellow, University of Calgary, Canada
Ulrich Thome, MD (Clinical fellow in Neonatology)	1998-2001	Neonatal Physician, Ulm, Germany
Charles Venglarik, PhD (Post-doctoral fellow)	1999-2001	Research Assistant Professor of Environmental Health, University Of Alabama at Birmingham, Birmingham, AL
Gang Yue, PhD (Post-doctoral fellow; 1991-1993) (Post-graduate Student; PhD program in PhD 1996	1991-1996	Research Associate, Dept. of Physiology and Biophysics, Emory Univ, Atlanta GA
Yongjian Zhou (Visiting Scientist)	2006- 2007	Visiting Scientist, First Municipal People's Hospital of Guangzhou, P.R. China
Sha Zhu, MD, PhD (Post-doctoral fellow)	1994-2000	Statistician, Preventive Medicine, Univ. of Alabama at Birmingham, Birmingham AL
Summer Students and Interns	Training Period	Last Known Position
Nathan Harris, RN	Summer 1998	Baptist Hospital, Birmingham AL
Tandeka Nix, MD	Summer 1999	Private practice, South Carolina
Allen Pickens, MD	Summer 1999	Assistant Professor, Thoracic Surgery; University of Michigan, Ann Arbor MI
Scott Rose	Summer 2000	Medical Engineer; Lutz, FL
Celeste Reese	Summer 2001	Medical Student, Baylor University
Katie Brown	Summer 2001	Medical Student University of South Alabama
Aronica Cotton	Summer 2002	Smith College, Mellon minority Program
Luke Crowder (CORD Mentor Program)	Summer 2005	Ramsey High School, Birmingham, AL
Namisha Patel	Summer 2005	Medical Student, University of Alabama at Birmingham, Birmingham, AL
Jeffrey Brand	Summer 2006	Rotational Medical Student, University of Alabama at Birmingham, Birmingham, AL

Shaun Williams	Summer 2006	Medical Student, University of Alabama at Birmingham
Abhesh Haritha (CORD Mentor Program)	Summer 2006	Altamont High School, Birmingham, AL
Colin Jones (CORD Mentor Program)	Summer 2007	Vestavia High School, Vestavia, Alabama
John Robert Walker	Summer 2007	Medical Student, University of Alabama at Birmingham, Birmingham, AL
Sarah McCurry	Summer 2007	Medical Student, University of Alabama at Birmingham, Birmingham, AL
Colin Jones	Summer 2008	Vestavia High School, Vestavia Alabama

TEACHING ACTIVITIES

1995	Pulmonary Mechanics, II
1998	MS-1 Physiology (Mechanics of Breathing)
1998-2004	Medical Physiology
1998	IBS-II course (Pulmonary Physiology & Pathophysiology)
1999	IBS 701 (Pathophysiology & Pharmacology of Disease)
2001	790 Pulmonary Physiology (Ion transport across alveolar epithelium)
2001-present	1 st Year Medical Students (Basic Science/Physiology-for Anesthesiology)
2002	Student Research Internship (Aronica Cotton, McNair scholar)
2003-2004	Student Mentoring (Respiratory distress syndrome, groups a, b, c)
2005	Respiratory Physiology (under Jim Johnson)
2005	Respiratory Physiology (Dental & Optometry classes-April 2005)
2005	Respiratory Physiology (Genetics- February)
2005-2006	Student Research Internship
2005-2006	Summer Research Fellowship
2006	94 Epithelial Cell Physiology (Physiology & Biophysics)

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

PUBLICATIONS

Books Edited

Biomembranes and Free Radicals, Elsevier, San Diego, CA, **S. Malalon** 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

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 4:143-147 2006

Lang, D.J, Jr., Davis I.C., Patel R.P., and **Matalon, S.**(2008) Oxidative 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., 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 Cl⁻ 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**. Liposome 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.

Reviewed Articles and Invited Reviews

I. In press or published

Sook Heun Kim, Yoon Jee Park, Sadis Matalon, and Elias I. Franses. Effect of Buffer Composition and Preparation Protocol on the Dispersion Stability and Interfacial Behavior of Aqueous DPPC Dispersions. *Colloids and Surfaces B: Biointerfaces*, in press, 2008. [doi:10.1016/j.colsurfb.200809.003](https://doi.org/10.1016/j.colsurfb.200809.003)

Janciauskiene S, Nita I, Subramaniam D, Li Q, Lancaster Jr JR, Matalon S. α 1-antitrypsin Inhibits the Activity of the Matriptase Catalytic Domain in vitro. *Am J Respir Cell Mol Biol*. 2008 Aug 21.

Leustik M, Doran S, Bracher A, Williams S, Squadrito GL, Schoeb TR, Postlethwait EM, Matalon S. Mitigation of Chlorine Induced Lung Injury By Low Molecular Weight Antioxidants. *Am J Physiol Lung Cell Mol Physiol*. 2008 Aug 15.

Chen L, Bosworth CA, Pico T, Collawn JF, Varga K, Gao Z, Clancy JP, Fontenberry JA, Lancaster Jr JR, Matalon S. Detanonoate and Nitrate Lipids Increase Chloride Secretion Across Lung Airway Cells. *Am J Respir Cell Mol Biol*. 2008 Feb 28;

Varga K, Goldstein RF, Jurkuvenaite A, Chen L, Matalon S, Sorscher EJ, Bebok Z, Collawn JF. Enhanced cell-surface stability of rescued DeltaF508 cystic fibrosis transmembrane conductance regulator (CFTR) by pharmacological chaperones. *Biochem J*. 2008 Mar 15;410(3):555-64.

Davis IC, Matalon S. Epithelial sodium channels in the adult lung--important modulators of pulmonary health and disease. *Adv Exp Med Biol*. 2007;618:127-40.

Song W, Matalon S. Modulation of alveolar fluid clearance by reactive oxygen-nitrogen intermediates. *Am J Physiol Lung Cell Mol Physiol*. 2007 Oct;293(4):L855-8. Epub 2007 Aug 10. Review.

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