

CURRICULUM VITAE

THOMAS WILLIAM FERKOL, JR., M.D.

DATE: November 10, 2010

PLACE OF BIRTH Würzburg, Germany

CITIZENSHIP USA

OFFICE ADDRESS Department of Pediatrics, Campus Box 8208
Washington University School of Medicine
One Children's Place
St. Louis, MO 63110

PRESENT POSITION Professor of Pediatrics, Cell Biology and Physiology
Director, Division of Allergy, Immunology, and Pulmonary Medicine

EDUCATION

- 1977-1981 Bachelor of Arts, Biology and Psychology, Case Western Reserve University, Cleveland, Ohio (*magna cum laude*).
- 1979-1980 Biology Honours, University of Nottingham, School of Biological Sciences, Nottingham, Great Britain.
- 1981-1985 *Medicinae doctor*, The Ohio State University College of Medicine, Columbus, Ohio.
- 1985-1986 Intern, Department of Pediatrics, North Carolina Memorial Hospital, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
- 1986-1988 Resident, Department of Pediatrics, North Carolina Memorial Hospital, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
- 1988-1989 Chief Resident, Department of Pediatrics, North Carolina Memorial Hospital, College of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
- 1989-1992 Pulmonology Fellow, Pediatric Pulmonology, Rainbow Babies and Children's Hospital, Case Western Reserve University School of Medicine, Cleveland, Ohio.

ACADEMIC POSITIONS AND EMPLOYMENT

- 1988-1989 Clinical Instructor, Department of Pediatrics, North Carolina Memorial Hospital, College of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
- 1992-1994 Instructor, Division of Pediatric Pulmonology, Department of Pediatrics, Rainbow Babies and Children's Hospital, Case Western Reserve University School of Medicine, Cleveland, Ohio.
- 1994-2000 Assistant Professor, Division of Pediatric Pulmonology, Department of Pediatrics, Rainbow Babies and Children's Hospital, Case Western Reserve University School of Medicine, Cleveland, Ohio.

- 2000-2008 Associate Professor (tenured), Division of Allergy and Pulmonary Medicine, Department of Pediatrics, Washington University School of Medicine, St. Louis, Missouri.
- 2000-2008 Associate Professor, Department of Cell Biology and Physiology, Washington University School of Medicine, St. Louis, Missouri.
- 2007-present Division of Biology and Biological Sciences (DBBS), Washington University School of Medicine, St. Louis, Missouri.
- 2009-present Professor (tenured), Department of Pediatrics, Division of Allergy, Immunology, and Pulmonary Medicine, Washington University School of Medicine, St. Louis, Missouri.
- 2009-present Professor, Department of Cell Biology and Physiology, Washington University School of Medicine, St. Louis, Missouri.

UNIVERSITY AND HOSPITAL APPOINTMENTS

- 1989 Attending physician, North Carolina Memorial Hospital, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
- 1992-2000 Teaching attending physician, Department of Pediatrics, Rainbow Babies and Children's Hospital, Cleveland, Ohio.
- 1992-2000 Bronchoscopy physician, Division of Pediatric Pulmonology, Department of Pediatrics, Rainbow Babies and Children's Hospital.
- 1992-2000 Attending physician, Division of Pediatric Pulmonology, Rainbow Babies and Children's Hospital.
- 2000-present Attending physician, Division of Allergy and Pulmonary Medicine, Washington University School of Medicine, St. Louis, Missouri.
- 2000-present Attending physician, Barnes-Jewish Hospital, Washington University School of Medicine, St. Louis, Missouri.
- 2000-present Director, Cystic Fibrosis Center, Washington University School of Medicine.
- 2000-present Director, Pediatric Pulmonary Fellowship Program, Department of Pediatrics, St. Louis Children's Hospital, Washington University School of Medicine.
- 2003-2007 Co-director, CFF Therapeutics Development Center, Washington University School of Medicine.
- 2006-present Director, Division of Pediatric Allergy, Immunology, and Pulmonary Medicine, Washington University School of Medicine, St. Louis, Missouri
- 2007-present Director, Pediatric Pulmonary Function Laboratory, Washington University School of Medicine, St. Louis, Missouri.
- 2008-present Consulting physician, Rankin-Jordan Subspecialty Hospital for Children, Maryland Heights, Missouri.

LICENSURE AND BOARD CERTIFICATION

- National Board of Medical Examiners, Diplomate
- American Board of Pediatrics, General Pediatrics Diplomate, Certified, 1990
- American Board of Pediatrics, General Pediatrics Diplomate (Re-certified, 1998, 2005)
- American Board of Pediatrics, Pediatric Pulmonology Subboard Diplomate, Certified, 1994
- American Board of Pediatrics, Pediatric Pulmonology Subboard (Re-certified, 2002)
- US Drug Enforcement Agency, Certified
- Medical License, State of Missouri (current)
- Medical License, State of Ohio (expired voluntarily)
- Medical License, State of North Carolina (expired voluntarily)

INDIVIDUAL HONORS AND AWARDS

- 1989 Floyd Denny Pediatric Alumni Society Award, Department of Pediatrics, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

- 1989 Cystic Fibrosis Foundation LeRoy Matthews Physician-Scientist Award.
- 1992 Rainbow Babies and Children's Hospital Trustees New Investigator Award.
- 1994 American Lung Association Edward Livingston Trudeau Scholar.
- 1994 Teaching Excellence Award, Department of Pediatrics, Case Western Reserve University School of Medicine, Cleveland, Ohio.
- 1997 Society for Pediatric Research, member.
- 1998- Best Doctors of America.
- 1999 EDI Innovation Award.
- 2004 European Cystic Fibrosis Conference Presentation Award.
- 2006- America's Top Pediatricians, Consumer's Research Council of America.
- 2009- American Pediatric Society, member.

DIVISIONAL HONORS AND AWARDS

- 2007 Child Magazine Best Children's Hospitals (2nd in respiratory diseases)
- 2008 US News and World Report, Best Children's Hospitals (12th in respiratory diseases)
- 2009 US News and World Report, Best Children's Hospitals (8th in respiratory diseases)
- 2009 Parent Magazine Best Children's Hospitals (4th in respiratory diseases)
- 2009 Pediatric Housestaff Teaching Award
- 2009 Cystic Fibrosis Foundation's Quality Care Award
- 2010 US News and World Report, Best Children's Hospitals (7th in respiratory diseases)

REVIEWER AND CONSULTANCIES

Granting Agencies

- National Institutes of Health, Gene and Drug Delivery (GDD) study section, 2003-2005, 2008
- National Institutes of Health (NCI), temporary reviewer
- National Institutes of Health, Medical Biochemistry study section, temporary reviewer
- National Institutes of Health, Gene Therapy/Inborn Errors study section, temporary reviewer
- American Thoracic Society Career Development Grants Review Committee 2007-2008
- Cystic Fibrosis Foundation Research Development Program Review Committee
- Cystic Fibrosis Foundation Functional Genomics Review Committee, *ad hoc* reviewer
- Cystic Fibrosis Trust (UK), *ad hoc* reviewer
- German Federal Ministry for Education and Research (BMBF), *ad hoc* reviewer
- L'Agence nationale de la recherche (France), *ad hoc* reviewer
- Mukoviszidose e.V. (Germany) *ad hoc* reviewer
- Italian Cystic Fibrosis Foundation, *ad hoc* reviewer
- Health Research Board (Ireland), *ad hoc* reviewer
- Michael Smith Foundation for Health Research (Canada), *ad hoc* reviewer

Professional Societies and Conferences

- Abstracts and presentations, American Thoracic Society Conference
- Abstracts and presentations, North American Cystic Fibrosis Conference.
- Abstracts and presentations, Pediatric Academic Societies Annual Meeting
- Abstracts and presentations, Society for Gene Therapy Annual Meeting

Institutional programs

- University of Iowa, Center for Gene Therapy of Cystic Fibrosis and Other Genetic Diseases, external reviewer
- Case Western Reserve University Cystic Fibrosis Research and Development Program, external reviewer
- University of Washington Cystic Fibrosis Research and Development Program, external reviewer
- University of Florida, General Clinical Research Center, external reviewer
- University of Florida, Molecular Therapy Core Center, external advisor

Pharmaceutical Companies

Glycomimetics, Medical Consultant (past)
Kalobios, Medical Advisory Board (past)
Novartis, Cystic Fibrosis Medical Advisory Board (past)
Genentech, Speakers Bureau (past)

Journals

Annals of Internal Medicine
American Journal of Physiology
Biochimica et Biophysica Acta
Journal of Biological Chemistry
Journal of Clinical Investigation
American Journal of Respiratory Cell and Molecular Biology
American Journal of Respiratory and Critical Care Medicine
American Journal of Physiology
European Respiratory Journal
Experimental Lung Research
Human Gene Therapy
Human Molecular Genetics
Gene Therapy
Infection and Immunity
Journal of Cystic Fibrosis
Journal of Leukocyte Biology
Journal of Pediatrics
Lancet
Molecular Medicine
Molecular Therapeutics
New England Journal of Medicine
Pediatrics
Paediatrics and Child Health
Pediatric Pulmonology
Pharmaceuticals
Proceedings of the American Thoracic Society
Respiration

PROFESSIONAL SOCIETIES, ORGANIZATIONS, AND COMMITTEES

American Thoracic Society 1997-present
Pediatric Assembly Program Committee 2000-2008.
Pediatric Assembly Program Committee Chair-elect, 2006-2007
Pediatric Assembly Program Committee Chair, 2007-2008.
Planning Committee, International Conference 2007-present
Pediatric Assembly, Chair-elect, 2008-2009
Health Policy Committee, 2008-2009
Pediatric Assembly, Chair, 2009-2011
Board of Directors, 2009-2011
American Board of Pediatrics, Member, Subboard of Pediatric Pulmonology 2011-2016.
Pediatric Pulmonary Training Directors Association (PEPTDA) 2000-present
PEPTDA Chair, 2007-2009.
Division of Lung Diseases, NHLBI/NIH Respiratory and Critical Care Training Workshop, 2009
Program Planning Committee, North American Cystic Fibrosis Conference, 2006-2007
Society for Pediatric Research, 1997-present
American Pediatric Society, 2010-present.
Primary Ciliary Dyskinesia Foundation Medical and Scientific Advisory Board 2005-present

Midwest Cystic Fibrosis Center Consortium, co-organizer
State of Missouri Department of Health and Senior Services, Cystic Fibrosis Standing Committee, 2003-present
State of Missouri Department of Health and Senior Service, Neonatal Screening Standing Committee, 2004-present
Heartland Genetics and Newborn Screening Collaborative Advisory Council, 2005-2007
Cystic Fibrosis Foundation Newborn Screening Special Interest Group
Medical Advisor, Gateway Chapter, Cystic Fibrosis Foundation, 2000-present
Association of Pediatric Program Directors, 2006-present
Fellow, American Academy of Pediatrics

UNIVERSITY AND HOSPITAL COMMITTEES

Department of Pediatrics, University of North Carolina at Chapel Hill:

1987-1989 Housestaff Selection Committee, Department of Pediatrics, North Carolina Memorial Hospital, University of North Carolina at Chapel Hill.
1988-1989 Education Committee, Department of Pediatrics, North Carolina Memorial Hospital, University of North Carolina at Chapel Hill.

Department of Pediatrics, Case Western Reserve University

1994-1995 Pediatric Resuscitation Committee, Department of Pediatrics, Rainbow Babies and Children's Hospital.
1994-2000 Intern Selection Committee, Department of Pediatrics, Rainbow Babies and Children's Hospital.
1995-2000 Education Committee, Department of Pediatrics, Rainbow Babies and Children's Hospital.

Department of Pediatrics, Washington University in St Louis

2004-present Graduate Medical Education Committee Internal Reviews, Washington University School of Medicine (*ad hoc* reviewer).
2005-2006 Newborn Screening Working Group, Department of Pediatrics, St. Louis Children's Hospital, Washington University School of Medicine.

INVITED PROFESSORSHIPS AND LECTURES

Intramural

Pediatric Grand Rounds, Department of Pediatrics, North Carolina Memorial Hospital, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, May, 1989.
Pediatric Grand Rounds, Department of Pediatrics, Rainbow Babies and Children's Hospital, Case Western Reserve University, Cleveland, Ohio, May, 1990.
Pediatric Grand Rounds, Department of Pediatrics, Rainbow Babies and Children's Hospital, Case Western Reserve University, Cleveland, Ohio, September, 1992.
Seminar, Department of Biochemistry, Case Western Reserve University, Cleveland, Ohio, September, 1993.
Seminars in Hematology/Oncology, Department of Internal Medicine, University Hospitals of Cleveland, Case Western Reserve University, Cleveland, Ohio, December, 1993.
Pediatrics Today, Department of Pediatrics, Rainbow Babies and Children's Hospital, Case Western Reserve University, Cleveland, Ohio, December, 1995.
Pediatric Research Conference, Department of Pediatrics, Rainbow Babies and Children's Hospital, Case Western Reserve University, Cleveland, Ohio, January, 1996.
Grand Rounds, Center for Human Genetics, Case Western Reserve University, Cleveland, Ohio, September, 1996.
Carl F. Doershuk Symposium, Department of Pediatrics, Rainbow Babies and Children's Hospital, Case Western Reserve University, Cleveland, Ohio, April, 1997.

Pediatric Research Conference, Department of Pediatrics, Rainbow Babies and Children's Hospital, Case Western Reserve University, Cleveland, Ohio, June, 1997.

Grand Rounds, Department of Pediatrics, Rainbow Babies and Children's Hospital, Case Western Reserve University, Cleveland, Ohio, March, 1999.

Pediatric Research Conference, Department of Pediatrics, Rainbow Babies and Children's Hospital, Case Western Reserve University, Cleveland, Ohio, April, 1999.

Pediatric Research Conference, Department of Pediatrics, Rainbow Babies and Children's Hospital, Case Western Reserve University, Cleveland, Ohio, January, 2000.

Pulmonary and Critical Care Medicine Grand Rounds, Department of Internal Medicine, Barnes-Jewish Hospital, Washington University, St Louis, Missouri, December, 2000.

Pediatric Research Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, January, 2001.

Pediatric Research Retreat, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, February, 2001.

Grand Rounds, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, February, 2001.

Pediatric Intern Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, March, 2001.

Early Bird Rounds, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, March, 2001.

Case Management Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, September, 2001

Pediatric Research Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, October, 2001.

Mini-Medical School, Washington University, St Louis, Missouri, November, 2001

Grand Rounds, Department of Obstetrics and Gynecology, Barnes-Jewish Hospital, Washington University, St Louis, Missouri, November, 2001.

Pulmonary and Critical Care Medicine Grand Rounds, Department of Internal Medicine, Barnes-Jewish Hospital, Washington University, St Louis, Missouri, November, 2001.

Pediatric Intern Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, January, 2002.

Case Management Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, April, 2002.

Early Bird Rounds, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, April, 2002.

Case Management Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, August, 2002.

Pediatric Research Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, October, 2002.

Mini-Medical School, Washington University, St Louis, Missouri, October, 2002.

Women and Children's Health Clerkship Lecture Series, Department of Obstetrics and Gynecology, Barnes-Jewish Hospital, Washington University, January, 2003.

Organizer and speaker, Cystic Fibrosis Parents Night Out, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, March, 2003.

Organizer and speaker, Cystic Fibrosis Parents Night Out, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, September, 2003.

Mini-Medical School, Washington University, St Louis, Missouri, October, 2003.

Pediatric Research Conference, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, October, 2003.

Early Bird Rounds, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, February, 2004.

Pediatric Oriented Research Unit (PORU) Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, June, 2004.

Case Management Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St Louis, Missouri, August, 2004.

Pediatric Research Conference, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, October. 2004.

Organizer, Cystic Fibrosis Parents Night Out, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, October. 2004.

Lecturer, Infectious Disease Fellowship Lecture Series, Departments of Internal Medicine and Pediatrics, Barnes-Jewish Hospital, Washington University, December, 2004.

Organizer and speaker, Cystic Fibrosis Parents Night Out, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, June, 2005.

Pediatric Research Conference, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, October, 2005.

Lung Biology Conference, Department of Internal Medicine, Barnes-Jewish Hospital, Washington University, St. Louis, Missouri, February, 2006.

Organizer, Clinical Pediatric Update, *Breathless: A Clinical Review of Pediatric Allergic and Pulmonary Diseases*, St. Louis Children's Hospital, St. Louis, Missouri, March, 2006.

Grand Rounds, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, April, 2006.

Case Management Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, July, 2006.

All Resident Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, July, 2007

Case Management Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, October, 2007.

Frontiers in Human Pathobiology Lecture Series, Washington University, St. Louis, Missouri, March, 2008.

Pulmonary and Critical Care Medicine Grand Rounds, Department of Internal Medicine, Barnes-Jewish Hospital, Washington University, St. Louis, Missouri, March, 2008.

All Resident Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, August, 2008.

Case Management Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, May, 2009.

Organizer, Clinical Pediatric Update, *Clinical Review of Pediatric Allergic and Pulmonary Diseases*, St. Louis Children's Hospital, St. Louis, Missouri, May, 2009.

All Resident Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, August, 2009.

Case Management Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, December, 2009.

Grand Rounds, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, May, 2010.

All Resident Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University, St. Louis, Missouri, August, 2010.

Extramural

Invited speaker, Cystic Fibrosis Foundation Conference. Toward New Therapeutic Treatments for Cystic Fibrosis: Gene Therapy, Williamsburg, Virginia. June, 1991.

Invited speaker, Cystic Fibrosis Foundation Conference. Toward New Therapeutic Treatments for Cystic Fibrosis: Gene Therapy, Williamsburg, Virginia. June, 1992.

Moderator, Workshop Session, Seventh Annual North American Cystic Fibrosis Foundation Conference. October, 1993.

Invited speaker, Seventh Annual North American Cystic Fibrosis Foundation Conference. October, 1993.

Invited speaker, Cystic Fibrosis Foundation Conference. Workshop on Gene Therapy in Cystic Fibrosis, Williamsburg, Virginia. June, 1994.

Invited seminar, Division of Chest Medicine, Department of Pediatrics, The Hospital for Sick Children, Toronto, Canada. September, 1994.

Invited seminar, Division of Pediatric Pulmonology, Department of Pediatrics, Cincinnati Children's Hospital, Cincinnati, Ohio. September, 1995.

Moderator, Roundtable, Ninth Annual North American Cystic Fibrosis Foundation Conference, October, 1995.

Invited speaker, Gene Therapy for Acquired Diseases, Vanderbilt University, Nashville, Tennessee. October, 1995.

Invited seminar, Howard Hughes Medical Center, University of Iowa, Iowa City, Iowa. December, 1995.

Invited speaker, Cystic Fibrosis Foundation Conference: Workshop on CFTR Function, Model Systems, Williamsburg, Virginia. June, 1997.

Invited seminar, Department of Pediatrics, Stanford University, Palo Alto, California. March, 1997.

Moderator, Workshop Session, Eleventh Annual North American Cystic Fibrosis Foundation Conference. October, 1997.

Invited speaker, Eleventh Annual North American Cystic Fibrosis Foundation Conference. October, 1997.

Invited speaker, Keystone Symposia on Cellular and Molecular Biology, "Non-viral Methods of Gene Transfer." January, 1998.

Invited seminar, Division of Pediatric Pulmonology, Department of Pediatrics, Cincinnati Children's Hospital, Cincinnati, Ohio. March, 1998.

Invited speaker, American Thoracic Society International Conference, Chicago, Illinois. April, 1998.

Invited speaker, Cystic Fibrosis Foundation Williamsburg Conference, Williamsburg, Virginia. June, 1998.

Invited speaker, Great Lakes Lung Conference, Niagra-on-the-Lake, Canada. September, 1998.

Visiting professor, Grand Rounds, Department of Pediatrics, All Children's Hospital, Tampa, Florida. November, 1998.

Invited speaker, Cystic Fibrosis Family Day, Department of Pediatrics, All Children's Hospital, Tampa, Florida. November, 1998.

Invited seminar, Howard Hughes Medical Center, University of Iowa, Iowa City, Iowa. February, 1999.

Invited speaker, Cystic Fibrosis Awareness Day, Department of Pediatrics, Washington University, St. Louis, Missouri. April, 1999.

Invited speaker, Cystic Fibrosis Foundation Williamsburg Conference, Williamsburg, Virginia. June, 1999.

Invited speaker, Department of Pediatrics, Washington University, St. Louis, Missouri. July, 1999.

Moderator, Workshop Session, Thirteenth Annual North American Cystic Fibrosis Foundation Conference. October, 1999.

Invited speaker, Ohio Regional Cystic Fibrosis Conference. Cincinnati, Ohio. April, 2000.

Session chair, Society for Pediatric Research Conference, Baltimore, Maryland. May, 2000.

Moderator, Workshop Session, Fourteenth Annual North American Cystic Fibrosis Foundation Conference. Baltimore, Maryland. November, 2000.

Invited speaker and session chair, American Thoracic Society International Conference, San Francisco, California. May, 2001.

Invited speaker and session chair, Cystic Fibrosis Foundation Williamsburg Conference, Williamsburg, Virginia. June, 2001.

Invited seminar, Department of Pediatrics, University of Michigan. Ann Arbor, Michigan. July, 2001.

Invited speaker, Infection and Inflammation in the Cystic Fibrosis Lung, Evening Satellite Symposium, Fifteenth Annual North American Cystic Fibrosis Conference, Orlando, Florida. October, 2001.

Visiting professor, Department of Biochemistry, University of Nebraska Medical Center. Omaha, Nebraska. December, 2001.

Invited seminar, Department of Pediatrics, Indiana University. Indianapolis, Indiana. May, 2002.

Session moderator and speaker, Workshop, Sixteenth Annual North American Cystic Fibrosis Foundation Conference. New Orleans, Louisiana. October, 2002.

Symposium chair and speaker, American Thoracic Society International Conference, Seattle, Washington. May, 2003.

Session chair and moderator, Cystic Fibrosis Foundation Williamsburg Conference, Williamsburg, Virginia. June, 2003.

Invited speaker, Symposium, Seventeenth Annual North American Cystic Fibrosis Foundation Conference. Anaheim, California, October, 2003.

Visiting professor, Grand Rounds, Department of Pediatrics, University of California, Los Angeles. Los Angeles, California, January, 2004.

Grand Rounds, Department of Pediatrics, Cardinal Glennon Hospital for Children, St Louis University. St Louis, Missouri. February, 2004.

Visiting scientist, Enzon Inc, Piscataway, New Jersey, February, 2004.

Session chair, Society for Pediatric Research Conference, San Francisco, California. May, 2004.

Visiting professor, Grand Rounds, Department of Pediatrics, University of Florida, Gainesville, Florida, May, 2004.

Co-organizer and speaker, Workshop, Primary Ciliary Dyskinesia, American Thoracic Society International Conference, Orlando, Florida. May, 2004.

Oral poster presentations, Twenty-seventh Annual European Cystic Fibrosis Conference, Birmingham, England. June, 2004 (awarded Best Poster Presentation, ECFC)

Moderator, Cystic Fibrosis Foundation Virtual Family Day, June, 2004.

Session moderator, Workshop, Eighteenth Annual North American Cystic Fibrosis Foundation Conference, St. Louis, Missouri. October, 2004.

Visiting professor, Grand Rounds, Departments of Internal Medicine and Genetics, Louisiana State University, New Orleans, Louisiana. December, 2004.

Chair and speaker, CME Lecture Series. *Inflammation in the Cystic Fibrosis Lung*. Chicago, Illinois, St. Louis, Missouri, and San Francisco, California, January-February, 2005.

Visiting professor, Symposium, European Graduate College, *Pseudomonas: Pathogenicity and Biotechnology*. Medizinische Hochschule Hannover, Hanover, Germany. February, 2005.

Visiting professor, Symposium, European Graduate College, *Pseudomonas: Pathogenicity and Biotechnology*. Danmarks Tekniske Universitet, Copenhagen, Denmark. February, 2005

Invited lecturer, Pediatric Year in Review Symposium, American Thoracic Society International Conference, San Diego, California. May, 2005.

Speaker, Diagnosis and Management of Primary Ciliary Dyskinesia Committee, American Thoracic Society International Conference, San Diego, California. May, 2005

Invited lecturer, Eastern Ontario Children's Hospital, Ottawa, Ontario. September, 2005.

Invited lecturer, The Hospital for Sick Children, Toronto, Ontario. September, 2005.

Moderator, Workshop Session, Nineteenth Annual North American Cystic Fibrosis Foundation Conference. October, 2005.

Invited lecturer, University of British Columbia, Vancouver, British Columbia, Canada, November, 2005.

Invited lecturer, University of Manitoba, Winnipeg, Manitoba. November, 2005.

Visiting professor, McGill University, Montreal, Quebec, Canada, January, 2006.

Invited lecturer, Dalhousie University, Halifax, Nova Scotia, Canada, January, 2006.

Invited lecturer, Miami Children's Hospital, Forty-first Annual Pediatric Postgraduate Course, Miami, Florida. February, 2006.

Invited lecturer, Pulmonary and Allergy Fellows Symposia, American Thoracic Society (ATS) and American Academy of Allergy, Asthma, and Immunology (AAAAI), San Diego, California. May, 2006.

Invited lecturer, American Thoracic Society International Conference, San Diego, California. May, 2006.

Invited lecturer, Clinical Advances in Pediatrics, Children's Mercy Hospital, Kansas City, Missouri, November, 2006.

Invited lecturer, Pulmonary and Allergy Fellows Symposia, American Thoracic Society (ATS) and American Academy of Allergy, Asthma, and Immunology (AAAAI), San Francisco, California. May, 2007.

Moderator, American Thoracic Society International Conference, San Francisco, California. May, 2007.

Speaker, CME program: *Practicing in a New Era of Expanded Newborn Screening and Preventive Medicine, as Illustrated by the Application of Molecular Biology to the Diagnosis and Treatment of Cystic Fibrosis*, St. Louis, Missouri. December, 2007.

Visiting professor, University of California, San Diego, San Diego, California, March, 2008.

Invited lecturer, Pulmonary and Allergy Fellows Symposia, American Thoracic Society (ATS) and American Academy of Allergy, Asthma, and Immunology (AAAAI), Toronto, Canada, May, 2008.

Moderator, American Thoracic Society International Conference, Toronto, Ontario. May, 2008.

Co-chair, Outstanding Science Session, American Thoracic Society International Conference. Toronto, Ontario. May, 2008.

Visiting professor and lecturer, Cotton Club, University of Colorado. Breckenridge, Colorado, April, 2009.

Lecturer, *Newborn Screening for Cystic Fibrosis*, Heartland Genetics and Newborn Screening Collaborative Conference, Jefferson City, Missouri, April, 2009.

Moderator, American Thoracic Society International Conference, San Diego, California, May, 2009.

Invited speaker and moderator, European Respiratory Society Annual Congress, Vienna, Austria, September, 2009.

Invited symposium speaker, Twenty-third Annual North American Cystic Fibrosis Foundation Conference. Minneapolis, Minnesota, October, 2009.

Visiting lecturer, National Jewish Health, University of Colorado. Denver, Colorado, October, 2009.

Moderator, American Thoracic Society International Conference, New Orleans, Louisiana, May, 2010.

Moderator, European Respiratory Society Annual Congress, Barcelona, Spain, September, 2010.

Moderator and lecturer, *Primary Ciliary Dyskinesia and Overlapping Syndromes*, St. Louis, Missouri, September 2010.

RESEARCH SUPPORT

A. Governmental

2006-2011	National Institutes of Health (HL082657). Title: <i>Delivering antiproteases to the bronchiectatic airway</i> . Position: Principal Investigator. Effort: 25%. Annual Direct Costs: \$200,000.
2004-2014	National Institutes of Health (HL096458) Title: <i>Genetic disorders of mucociliary clearance</i> . Position: Site Principal Investigator (Principal Investigator: Michael Knowles, M.D.). Effort: 10%. Annual Direct Costs: \$937,768. Site Budget: \$86,753.
2010-2015	National Institutes of Health (HL101465). Title: <i>Influence of the enteric microbiome on the genesis of bronchopulmonary dysplasia</i> . Position: Co-principal investigator. Effort: 5%. Annual Direct Costs: \$350,000.

2006-present State of Missouri. Title: *Cystic Fibrosis Newborn Screening*. Position: Director. Effort: 2%. Annual Direct Costs: \$64,056.

B. Non-Governmental

2008-2010 Children's Discovery Institute. Title: *Gene discovery and treatment of primary ciliary dyskinesia*. Position: Principal Investigator. Effort: 5%. Annual Direct Costs: \$100,000.

2008-2011 Children's Discovery Institute. Title: *Functional, structural, and genetic characterization of ciliopathies*. Position: Principal Investigator. Effort: 5%. Annual Direct Costs: \$200,000.

2009-2011 Cystic Fibrosis Foundation. Title: *FDG-PET imaging in young cystic fibrosis patients*. Position: Principal Investigator. Effort: 10%. Annual Direct Costs: \$100,000.

2008-2011 Cystic Fibrosis Foundation. Title: *Characterization of MRSA infection and colonization in cystic fibrosis*. Position: Site Principal Investigator. (Principal Investigator: Marianne Muhlebach, M.D.). Effort: 2%. Annual Direct Costs: \$150,000.

2000-present Cystic Fibrosis Foundation. Title: *Cystic Fibrosis Center Grant*. Position: Co-director. Effort: 5%. Annual Direct Costs (current): \$215,760.

C. Previous Support

1989-1995 Cystic Fibrosis Foundation. Title: *LeRoy Matthews Physician-Scientist Award*. Position: Investigator. Annual Direct Costs: \$75,000.

1994-1995 American Lung Association Research Grant. Title: *Receptor-mediated transfer of the human alpha₁-antitrypsin gene*. Position: Principal Investigator. Annual Direct Costs: \$25,000.

1991-1996 National Institutes of Health (DK43999). Title: *Targeting genes to cells relevant to cystic fibrosis*. Position: Co-Investigator (Principal Investigator, Pamela B. Davis, M.D., Ph.D.). Annual Direct Costs: \$118,350.

1994-1996 National Institutes of Health (DK27651). Title: *Receptor-mediated gene transfer into airway cells*. Position: Co-Investigator (Principal Investigator, Pamela B. Davis, M.D., Ph.D.). Annual Direct Costs: \$159,997.

1995-1997 Cystic Fibrosis Foundation. Title: *Engineering a protein complex for receptor-mediated gene transfer*. Position: Co-Investigator (Principal Investigator, Pamela B. Davis, M.D., Ph.D.). Annual Direct Costs: \$50,000.

1995-1997 Cystic Fibrosis Foundation. Title: *Modulation of host responses to gene delivery systems*. Position: Co-Investigator (Principal Investigator, Michael Tosi, M.D.). Annual Direct Costs: \$50,000.

1996-1998 National Institutes of Health (P30DK27651). Feasibility Project Title: *Targeting alpha₁-antitrypsin to the airways*. Position: Principal Investigator. Annual Direct Costs: \$40,000.

1994-1998 National Institutes of Health (HL53672). Title: *Gene therapy of hemophilias*. Position: Co-Investigator (Principal Investigator, Richard W, Hanson, Ph.D.). Annual Direct Costs: \$233,000.

1994-1999 National Institutes of Health (DK48996). Title: *Gene transfer into the respiratory tract in vivo*. Position: Principal Investigator. Annual Direct Costs: \$125,669.

1998-2000 National Institutes of Health (HL60293). Title: *Inflammation in the cystic fibrosis lung*. Position: Project Leader (Principal Investigator, Pamela B. Davis, M.D., Ph.D.). Annual Direct Costs of Project: \$125,901.

1998-2000 National Institutes of Health (HL60293). Title: *Inflammation in the cystic fibrosis lung*. Position: Co-investigator. (Principal Investigator, Pamela B. Davis, M.D., Ph.D.). Annual Direct Costs of Project: \$170,140.

- 1998-2000 National Institutes of Health (DK52981). Title: *Targeting the SEC-receptor for gene therapy*. Position: Co-Investigator (Principal Investigator, Pamela B. Davis, M.D., Ph.D.). Annual Direct Costs: \$184,500.
- 1999-2001 Cystic Fibrosis Foundation. Title: *Targeted delivery of interleukin-10*. Position: Principal Investigator. Annual Direct Costs: \$100,000.
- 1998-2003 National Institutes of Health (P01 HL51811). Title: *Adeno-associated virus vectors for cystic fibrosis*. Position: Consortium (Principal Investigator, William Guggino, M.D.; Project Leader: Terence Flotte, M.D.) Annual Direct Costs: \$34,973.
- 2002-2004 Cystic Fibrosis Foundation Research Grant. Title: *Neutrophil proteases in the pathogenesis of CF lung disease*. Position: Principal Investigator. Annual Direct Costs: \$40,000.
- 2002-2005 Cystic Fibrosis Foundation Clinical Research Grant. Title: *Positron emission tomographic imaging in cystic fibrosis*. Position: Co-investigator (Principal Investigator: Daniel Schuster, M.D.). Annual Direct Costs: \$79,895.
- 2004-2006 Cystic Fibrosis Foundation Research Grant. Title: *Neutrophil proteases and innate airway defenses in cystic fibrosis*. Position: Principal Investigator. Annual Direct Costs: \$60,000.
- 2003-2006 March of Dimes Research Grant. Title: *Genotype-phenotype relationships in the cystic fibrosis airway*. Position: Principal Investigator. Annual Direct Costs: \$80,000.
- 2001-2007 National Institutes of Health (R01 HL64044). Title: *Targeted delivery of interleukin-10*. Position: Principal Investigator. Annual Direct Costs: \$175,000.
- 2003-2007 Cystic Fibrosis Foundation. Title: *Therapeutic Development Network Center*. Position: Co-director. Effort: 5%. Annual Direct Costs: \$100,000.
- 2004-2007 National Institutes of Health (R21 HL079024) Title: *Genetic variants of primary ciliary dyskinesia*. Position: Principal Investigator. Effort: 15%. Annual Direct Costs: \$150,000

THERAPEUTIC DEVELOPMENT NETWORK AND CLINICAL RESEARCH PROJECTS

- Epidemiologic study of cystic fibrosis: A multi-center longitudinal follow-up study of patients with cystic fibrosis for monitoring pulmonary function, pulmonary exacerbations, and the safety of long-term treatment with Pulmozyme ZO595n*. Position: Site Principal Investigator. Sponsor: Genetech (closed).
- Allergic aspergillosis in cystic fibrosis*. Position: Collaborator (Principal Investigator: Raymond Slavin, M.D., St Louis University School of Medicine). Sponsor: National Institutes of Health (closed).
- Genetic modifiers in cystic fibrosis lung disease*. Position: Site Investigator. (Principal Investigators: Michael Knowles, M.D. University of North Carolina School of Medicine, Michael Konstan, M.D. and Mitchell Drumm, Ph.D. Case Western Reserve University). Sponsor: National Institutes of Health (enrollment ongoing).
- Genetic modifiers of cystic fibrosis*. Position: Site Investigator. (Principal Investigators: Garry Cutting, M.D. Johns Hopkins University). Sponsor: National Institutes of Health (enrollment ongoing).
- Positron emission tomographic imaging in cystic fibrosis*. Position: Co-Investigator. Sponsor: Cystic Fibrosis Foundation (closed).
- A randomized, double-blind, placebo-controlled study to investigate the efficacy and safety of 24 weeks of oral treatment with BIIL 284 BS in adult and pediatric cystic fibrosis patients*. Position: Site Principal Investigator. Sponsor: Boeringer-Ingelheim (closed).
- Growth hormone use in cystic fibrosis: a multicenter study*. Position: Site Principal Investigator. Sponsor: Genentech (closed).

A multicenter, double-blind, placebo controlled, phase II study of aerosolized TGAAVCF for the treatment of cystic fibrosis (protocol 25E01). Position: Site Principal Investigator. Sponsor: Targeted Genetics (closed).

Phase 2, multicenter, randomized, controlled, open-label study of the safety and efficacy of Nutropin AQ [somatropin (DNA origin) injection] for the treatment and growth restriction in children with cystic fibrosis. Position: Site Principal Investigator. Sponsor: Genentech (closed).

Phase 2, randomized, double-blind, parallel dose ranging study of oral theraCLEC-total in cystic fibrosis subjects with exocrine pancreatic insufficiency. Position: Site Principal Investigator. Sponsor: Altus (closed).

Assessment of induced sputum as a tool to evaluate anti-inflammatory agents in patients with cystic fibrosis. Position: Site Principal Investigator. Sponsor: TDN (closed).

The EPIC Observational Study: Longitudinal assessment of risk factors for and impact of Pseudomonas aeruginosa acquisition and early anti-Pseudomonas treatment in children with CF. Position: Site Principal Investigator. Sponsor: TDN (enrollment ongoing).

A randomized, open-label, multicenter, phase 3 trial to assess the safety of tobramycin inhalation powder (TIP) compared to TOBI in cystic fibrosis (CF) subjects. Position: Site Principal Investigator. Sponsor: Novartis (closed).

A randomized, double-blind within dose, placebo-controlled study to investigate the safety, tolerability and pharmacokinetics of increasing single- and multiple-doses (28-day dosing) of tiotropium bromide administered once daily via the Respimat device in cystic fibrosis patients Position: Site Principal Investigator. Sponsor: Boehringer-Ingelheim (closed).

Phase 3b study in subjects with cystic fibrosis and chronic Burkholderia spp. infection. Position: Site Principal Investigator. Sponsor: Gilead (enrollment ongoing).

NATIONAL QUALITY IMPROVEMENT PROGRAMS

Improving Care for Children with Cystic Fibrosis Breakthrough Series Collaborative. Position: Site team leader. Sponsor: National Initiative for Children's Healthcare Quality (NICHQ) and Cystic Fibrosis Foundation. 2003-2004.

Cystic Fibrosis Foundation Learning Leadership Collaborative. Position: Team leader. Sponsor: Cystic Fibrosis Foundation. 2004-2005.

CLINICAL TITLE AND RESPONSIBILITIES

1989	Attending physician, North Carolina Memorial Hospital, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.
1992-2000	Bronchoscopy physician, Division of Pediatric Pulmonology, Department of Pediatrics, Rainbow Babies and Children's Hospital.
1992-2000	Attending physician, Division of Pediatric Pulmonology, Rainbow Babies and Children's Hospital, Cleveland, Ohio.
2000-present	Attending physician, Division of Pediatric Allergy, Immunology, and Pulmonary Medicine, St. Louis Children's Hospital, Washington University School of Medicine, St. Louis, Missouri.
2000-present	Attending physician, Barnes-Jewish Hospital, Washington University School of Medicine, St. Louis, Missouri.

TEACHING TITLE AND RESPONSIBILITIES

1992-2000	Attending physician, Division of Pediatric Pulmonology, Department of Pediatrics, Rainbow Babies and Children's Hospital.
1992-2000	Bronchoscopy physician, Division of Pediatric Pulmonology, Department of Pediatrics, Rainbow Babies and Children's Hospital.
1992-2000	Teaching attending physician, Department of Pediatrics, Rainbow Babies and Children's Hospital, Case Western Reserve University.

1992-2000	Lecturer, Pulmonary Physiology Course, Rainbow Babies and Children's Hospital, Case Western Reserve University.
1992-2000	Supervising attending, Pediatric Pulmonology Clinic, Rainbow Babies and Children's Hospital, Case Western Reserve University.
1992-2000	Lecturer, Housestaff Patient Management Conference, Rainbow Babies and Children's Hospital, Case Western Reserve University.
1994-2000	Faculty Preceptor in Senior Housestaff Rounds, Rainbow Babies and Children's Hospital, Case Western Reserve University.
1992-2000	Clinical Instructor, Physical Diagnosis course, Case Western Reserve University.
1994-2000	Lecturer, Medical Student Core Lecture Series, Rainbow Babies and Children's Hospital, Case Western Reserve University.
2000-present	Attending physician, Division of Allergy and Pulmonary Medicine, Department of Pediatrics, St. Louis Children's Hospital, Washington University.
2002-present	Ward attending, Department of Pediatrics, St. Louis Children's Hospital, Washington University.
2000-present	Coordinator and lecturer, Pediatric Pulmonary Physiology Course, Department of Pediatrics, St. Louis Children's Hospital, Washington University.
2000-present	Coordinator and lecturer, Pediatric Pulmonary Pathology Course, Department of Pediatrics, St. Louis Children's Hospital, Washington University.
2000-present	Coordinator and lecturer, Pediatric Research Conference, Department of Pediatrics, St. Louis Children's Hospital, Washington University.
2000-present	Lecturer, Case Management Conference, St. Louis Children's Hospital, Washington University.
2000-present	Director, Pediatric Pulmonary Fellowship Program, Department of Pediatrics, St. Louis Children's Hospital, Washington University.
2000-present	Supervising attending, Pediatric Pulmonology Fellows Clinic, Department of Pediatrics, St. Louis Children's Hospital, Washington University.
2003	Lecturer, Women and Children's Health Clerkship Lecture Series, Department of Obstetrics and Gynecology, Barnes-Jewish Hospital, Washington University.
2004	Lecturer, Infectious Disease Fellowship Lecture Series, Departments of Internal Medicine and Pediatrics, Barnes-Jewish Hospital, Washington University.
2004-2006	Clinical Mentor, Markey Special Emphasis Pathway in Human Pathobiology

FACULTY MENTOR

Trainees: Housestaff

1995-1997	Faculty Mentor, Department of Pediatrics: John Strong, M.D.
1998-2000	Faculty Mentor, Department of Pediatrics: Nathan Kraynak, M.D.
1999-2000	Faculty Mentor, Department of Pediatrics: Bradley Arnold, M.D.

RESEARCH MENTOR

Trainees: High School Students

2009-2010	Megan Weber. Senior project, Rockwood Summit High School. <i>Assessing of inflammation in the cystic fibrosis lung.</i> Missouri Consortium of Science Research.
-----------	---

Trainees: Undergraduate Students

1993-1994	Jennifer Weber. Senior independent study project, Case Western Reserve University. <i>Targeting the polymeric immunoglobulin receptor.</i>
2003-2004	Molly Arvin. Senior research project, Washington University in St. Louis. <i>Genetic determinants of inflammation in cystic fibrosis airway epithelia</i> (recipient of the Cystic Fibrosis Foundation Student Traineeship Award).
2003-2004	Blaine Fennel. Senior Thesis, McKendree College. <i>Anti-inflammatory therapy in cystic fibrosis.</i>

2005-2006 **Brad Schoss.** Research project, Washington University in St Louis. *Bacterial colonization of the cystic fibrosis airway before lung transplantation.*

Trainees: Medical Students

1994-1995 **Alexandra Pellicena-Palle.** Medical student (MSII). Case Western Reserve University School of Medicine. *Immunological consequences of gene transfer via the polymeric immunoglobulin receptor* (recipient of Cystic Fibrosis Foundation Student Traineeship Award).

1995-1996 **Stephanie Lodish.** Medical student (MSIV). Case Western Reserve University School of Medicine. *Transfer of the human alpha₁-antitrypsin gene to tissue macrophages.*

2001-2002 **Jessica Pittman.** Medical Student (MSII) Washington University School of Medicine. *Use of positron emission tomography to measure airway inflammation in murine model of cystic fibrosis lung disease* (recipient of the Cystic Fibrosis Foundation Student Traineeship Award).

2008-2009 **Amber Watters.** Medical Student (MSIII) Case Western Reserve University School of Medicine. *Modeling primary ciliary dyskinesia.*

Trainees: Graduate Students

2004-2007 **Regina Rowe** (doctoral candidate), Thesis committee. Project: *Interaction of Andes virus with the respiratory epithelium* (A. Pekosz, advisor)

2007-2008 **Jessica Marie Esparza** (doctoral candidate), Thesis committee. Project: *Genetic control of basal body and flagellar assembly* (S. Dutcher, advisor)

Trainees: Housestaff

1994-1995 **Starla Glick, M.D., Evelyn Jones M.D., Rima Jubran M.D., and William Oehlenschlager M.D.** Supervising attending. Senior housestaff projects. *Evaluation of a clinical scoring system for hypoxemia in infants with lower respiratory tract infections.*

1996-1997 **John Strong, M.D.** Supervising attending. Senior housestaff project. *The impact of housestaff education on asthma morbidity in children.*

1999-2000 **Nathan Kraynack M.D., Lori Racha M.D., and Lisa Cherullo M.D.** Supervising attending. Senior housestaff project. *Use of nebulized bronchodilators in infants with acute bronchiolitis.*

Trainees: Postdoctoral Fellows

1995-1998 **Anna van Heeckeren, D.V.M.** Postdoctoral fellow. Project: *Effect of Pseudomonas infection on gene transfer into the lungs.*

1996-2000 **Starla Glick, M.D.** Clinical fellow. Project: *Function of anti-epithelial growth factor Fv-based fusion proteins* (recipient of the Cystic Fibrosis Foundation Leroy Matthews Physician-Scientist Award).

2000-2001 **Nada Aldallal, M.D.** Clinical fellow. Project: *Airway inflammation in cystic fibrosis.*

2000-2002 **Julie Sedor, M.D.** Clinical fellow. Project: *The role of neutrophil-derived proteases in cystic fibrosis lung disease.*

2003-2005 **Michael French, M.D.** Clinical fellow. Project: *Asymmetric inflammatory responses of airway epithelia.*

2005-2007 **Hauw Lie, M.D.** Clinical fellow. Project: *Genotype-phenotype relationships in primary ciliary dyskinesia.*

2004-present **Michelle Farberman, Ph.D.** Postdoctoral fellow. Project: *Mechanisms of vectoral chemokine release.*

Postgraduate scholars

2009

Amina Selimovic, M.D. Fulbright Visiting Scholar, Medical Sciences. Pediatrician, University Hospital, University of Sarajevo, Sarajevo, Bosnia-Herzegovia. Project: *Bronchoalveolar lavage in children.*

BIBLIOGRAPHY

Original Articles (peer reviewed)

- 1 **Ferkol T**, Kaetzel CS, Davis PB: Gene transfer into respiratory epithelial cells by targeting the polymeric immunoglobulin receptor. *Journal of Clinical Investigation* 1993;93:2394-2400.
- 2 **Ferkol T**, Lindberg GL, Perales JC, Chen J, Ratnoff OD, Hanson RW: Regulation of the phosphoenolpyruvate carboxykinase/human factor IX gene introduced into the livers of adult rats by receptor-mediated gene transfer. *FASEB Journal* 1993;7:1081-91.
- 3 Perales JC, **Ferkol T**, Molas M, Hanson RW: Receptor-mediated gene transfer. *European Journal of Biochemistry* 1994;226:255-266.
- 4 Perales JC, **Ferkol T**, Beegen H, Ratnoff OD, Hanson RW: Persistent expression and transcriptional regulation of genes introduced into the livers of adult animals by receptor targeted uptake. *Proceedings of the National Academy of Science, USA* 1994;91:4086-90.
- 5 Margolis PQ, **Ferkol T**, Marsocci S, Super DM, Keyes LL, McNutt R, Harrell FE: The accuracy of the clinical examination in detecting hypoxemia in infants with respiratory illness. *Journal of Pediatrics* 1994;124:552-60.
- 6 **Ferkol TW**, McDowell LM, Gauderer MWL, Alpert SE: Sinopulmonary complications of congenital bronchobiliary fistula. *Clinical Pediatrics* 1994;33:181-4.
- 7 **Ferkol T**, Perales JC, Kaetzel CS, Eckman E, Hanson RW, Davis PB: Gene transfer into airways in animals by targeting the polymeric immunoglobulin receptor. *Journal of Clinical Investigation* 1995;95:493-502.
- 8 **Ferkol T**, Pellicena-Palle A, Eckman E, Perales JC, Redman R, Tosi M, Davis PB: Immunologic responses of gene transfer into mice via the polymeric immunoglobulin receptor. *Gene Therapy* 1996;3:669-78.
- 9 **Ferkol T**, Perales JC, Mularo F, Hanson RW: Receptor-mediated gene transfer into macrophages. *Proceedings of the National Academy of Science USA* 1996;93:101-5.
- 10 Perales JC, Grossman GA, Molas M, Liu G, **Ferkol T**, Harpst J, Oda H, Hanson RW: Biochemical and functional characterization of DNA complexes capable of targeting genes to hepatocytes via the asialoglycoprotein receptor. *Journal of Biological Chemistry* 1997;272:7398-407.
- 11 Ziady A-G, Perales JC, **Ferkol T**, Gerken T, Beegen H, Perlmutter DH, Davis PB: Gene transfer into hepatoma cell lines via the serpin enzyme complex (SEC) Receptor. *American Journal of Physiology: Liver* 1997;273:G545-G52.
- 12 van Heeckeren A, Wallenga R, Konstan MW, Bonfield T, Davis PB, **Ferkol T**: Excessive inflammatory response of cystic fibrosis mice to bronchopulmonary infection with *Pseudomonas aeruginosa*. *Journal of Clinical Investigation* 1997;100:2810-5.
- 13 **Ferkol T**, Mularo F, Hilliard J, Lodish S, Perales JC, Ziady A-G, Konstan MW: Transfer of the gene encoding human alpha₁-antitrypsin into macrophages via the mannose receptor. *American Journal of Respiratory Cell and Molecular Biology* 1998;18:591-601.
- 14 van Heeckeren A, **Ferkol T**, Zakem-Cloud H, Hamedani A, Mularo F, Konstan M, Tosi M: Effects of chronic *Pseudomonas*-induced lung inflammation on adenovirus-mediated gene transfer. *Gene Therapy* 1998;5:345-51.
- 15 Ziady A-G, **Ferkol T**, Gerkin T, Perlmutter DJ, Davis PB: Ligand substitution of receptor targeted DNA complexes affects gene transfer into hepatoma cells. *Gene Therapy* 1998;5:1685-97.
- 16 Ziady A-G, **Ferkol T**, Dawson D, Perlmutter DH, Davis PB: Chain length of the polylysine in receptor-targeted gene transfer complexes affects duration of reporter gene expression both in vitro and in vivo. *Journal of Biological Chemistry* 1999;274:4908-16.

- 17 Eckman E, Mallender W, Szegletes T, Silski C, Schreiber J, Davis P, **Ferkol T**: *In vitro* transport of active alpha₁-antitrypsin to the apical surface of epithelia by targeting the polymeric immunoglobulin receptor. *American Journal of Respiratory Cell and Molecular Biology* 1999;21:246-52.
- 18 Chmiel J, Drumm M, Konstan M, **Ferkol TW**, Kercksmar C: Pitfall in the use of genotype analysis as the sole diagnostic criterion for cystic fibrosis. *Pediatrics* 1999;103:823-6.
- 19 van Heeckeren A, Tscheikuna J, Davis PB, Erokwu B, Haxhiu M, **Ferkol T**: Effect of *Pseudomonas* infection on weight loss, lung mechanics, and cytokines in mice. *American Journal of Respiratory and Critical Care Medicine* 2000;161:271-9.
- 20 **Ferkol T**, Eckman E, Swadani S, Silski C, Davis P: The transport of bifunctional proteins across respiratory epithelial cells via the polymeric immunoglobulin receptor. *American Journal of Respiratory and Critical Care Medicine* 2000;161:944-51.
- 21 Wu P, Xiao W, Conlon T, Hughs J, **Ferkol T**, Flotte T, Muzyczka N: Mutational analysis of the adeno-associated virus type 2 (AAV2) capsid gene and construction of AAV2 vectors with altered tropism. *Journal of Immunology* 2000;74:8635-47.
- 22 Mhanna MJ, **Ferkol T**, Dreshaj IA, van Heeckeren A, Kelley T, Martin RJ, Haxhiu MA: Nitric oxide deficiency contributes to the impairment of airway relaxation in cystic fibrosis mice. *American Journal of Respiratory Cell and Molecular Biology* 2001;24:621-6.
- 23 Gupta S, Eastman J, Silski C, **Ferkol T**, Davis PB: Single chain Fv: a ligand in receptor mediated gene delivery. *Gene Therapy* 2001;8:586-92.
- 24 Marshall LJ, Perks B, **Ferkol T**, Shute J: Interleukin-8 is released by primary bronchial epithelial cells in culture as an inactive complex with secretory component. *Journal of Immunology*. 2001;167:2816-23.
- 25 Ziady AG, Kelley T, Milliken E, **Ferkol T**, Davis PB: Partial correction of the nasal chloride transport defect in CF mice after apical application of serpin enzyme complex receptor targeted DNA complexes. *Molecular Therapy*. 2002;5:413-9.
- 26 Aldallal N, McNaughton EE, Manzel LJ, Rabe AM, Karp PH, Zabner J, Jacquot J, **Ferkol TW**, Look DC: Inflammatory response in airway epithelial cells isolated from cystic fibrosis lungs. *American Journal of Respiratory and Critical Care Medicine* 2002;166:1248-56.
- 27 Schuster DP, Kozlowski J, Hogue L, **Ferkol TW**: Imaging lung inflammation in a murine model of *Pseudomonas* infection: a positron emission tomography study. *Experimental Lung Research* 2003;29:45-57.
- 28 Richard J-C, Zhou Z, Ponde DE, Dence CS, Factor P, Reynolds PN, Luker GD, Sharma V, **Ferkol T**, Piwnicka-Worms D, Schuster DP: Imaging pulmonary gene expression with positron emission tomography (PET). *American Journal of Respiratory and Critical Care Medicine* 2003;167:1257-63.
- 29 **Ferkol T**, Cohn, L, Phillips, T, Smith A, Davis PB: Targeted delivery of antiprotease to the epithelial surface of human tracheal xenografts. *American Journal of Respiratory and Critical Care Medicine* 2003;167:1374-9.
- 30 Richard, JC, Factor, P, **Ferkol, T**, Ponde D, Schuster D: Repetitive imaging of reporter gene expression in the lung. *Molecular Imaging*. 2003;2:342-9.
- 31 van Heeckeren AM, Scaria A, Schluchter MD, Wadsworth S, **Ferkol T**, Davis PB: Delivery of CFTR by adenovirus to CF mouse lung improves survival in response to chronic *Pseudomonas* lung infection. *American Journal of Physiology, Lung Cellular and Molecular Physiology* 2004;286:L717-26.
- 32 Tosi MF, van Heeckeren A, **Ferkol TW**, Askew D, Harding CV, Kaplan JM: Effects of chronic *Pseudomonas aeruginosa* infection on development of cytotoxic T-lymphocyte response to adenovirus vectors. *Gene Therapy* 2004;11:1427-33.
- 33 Rosenbluth DB, Wilson K, **Ferkol T**, Schuster D: Lung function decline in cystic fibrosis patients and timing for lung transplantation referral. *Chest*. 2004;126:412-9.
- 34 Siminger J, Miller C, Braag S, Tang Q, Yue H, Detrisac C, **Ferkol T**, Guggino WB, Flotte TR: Functional characterization of an rAAV5-pseudotyped-CFTR-vector. *Human Gene Therapy*. 2004;15:832-41.
- 35 Hardin, DS, Chul A, **Ferkol, T**, Howenstine M, Stames S, Rice J, Dyson M, Morse, M, Blagburn M, Nagy,R, Prestidge C, Seilheimer DK: Growth hormone treatment improves

- nutritional status in children with cystic fibrosis treated with enteral nutrition. *Journal of Pediatrics*. 2005;146:324-8.
- 36 Joseph T, Look DC, **Ferkol TW**: NF-kB activation and sustained IL-8 gene expression in primary cultures of cystic fibrosis airway epithelial cells stimulated with *Pseudomonas aeruginosa*. *American Journal of Physiology, Lung Cellular and Molecular Physiology*. 2005;288:L471-9.
 - 37 Virella-Lowell I, Zusman B, Foust K, Loiler S, Conlon T, Song S, Chesnut KA, **Ferkol T**, Flotte TR: Enhancing rAAV vector expression in the lung. *Journal of Gene Medicine*. *J Gene Med*. 2005;7:842-50
 - 38 Hardin, DS, **Ferkol, T**, Chul A, Dreimane D, Dyson M, Morse M, Prestidge C, Rice J, Seilheimer DK: A retrospective study of growth hormone use in adolescents with cystic fibrosis. *Journal of Clinical Endocrinology (Oxford)*. 2005;62:560-6.
 - 39 Drumm ML, Konstan MW, Schluchter MD, Handler A, Pace R, Zou F, Zariwala M, Fargo D, Xu A, Dunn JM, Darrach RJ, Dorfman R, Sandford AJ, Corey M, Zielenski J, Durie P, Goddard K, Yankaskas JR, Wright FA, Knowles MR; **Gene Modifier Study Group**: Genetic modifiers of lung disease in cystic fibrosis. *N Engl J Med*. 2005;**353**:1443-53.
 - 40 Johnson MR, **Ferkol TW**, Shepherd RW: Energy cost of daily activity and exercise in children and adolescents with cystic fibrosis. *Journal of Cystic Fibrosis*. 2006;5:53-8.
 - 41 Chen DL, **Ferkol TW**, Mintun MA, Pittman J, Wilson, K Rosenbluth DB, Schuster DP: Quantifying pulmonary inflammation in cystic fibrosis with positron emission tomography. *American Journal of Respiratory and Critical Care Medicine*. 2006;173:1363-9.
 - 42 Hardin DS, Prestidge C, Ahn C, Quittner A, Brown B, Royce F, Chatfield B, Rice J, Dyson M, Seilheimer DK, **Ferkol, T**, Steelman J, Howenstine M, Shepherd R: Growth hormone improves clinical status in prepubertal children with cystic fibrosis – results of a multicenter. randomized controlled trial. *Journal of Clinical Endocrinology and Metabolism*. 2006;91:4925-9.
 - 43 Sedor J, Hogue L, Akers K, Schreiber J, **Ferkol T**: Altered clearance of *Pseudomonas aeruginosa* from lungs of mice deficient in cathepsin-G. *Pediatric Research*. 2007;61:26-31.
 - 44 Fennel PB, Quante J, Wilson K, Boyle M, Strunk R, **Ferkol T**: Use of high-dose ibuprofen in a pediatric cystic fibrosis center. *Journal of Cystic Fibrosis*. 2007;6:153-8
 - 45 Gregory AD, Hogue LA, **Ferkol TW**, Link DC: Regulation of systemic and local neutrophil responses by GCSF during pulmonary bacterial infection. *Blood*. 2007;109:3235-43
 - 46 Elizur A, Orscheln RC, **Ferkol TW**, Atkinson JJ, Dunne WM, Storch GA, Cannon CL: Panton-Valentine leukocidin-positive methicillin-resistant *Staphylococcus aureus* lung infection in patients with cystic fibrosis. *Chest*. 2007;131:1718-25
 - 47 Elizur A, Orscheln RC, **Ferkol TW**, Dunne WM, Storch GA, Cannon CL: Transmission of Panton-Valentine leukocidin-positive methicillin sensitive *Staphylococcus aureus* between siblings with cystic fibrosis. *Journal of Pediatrics* 2007;151:90-2.
 - 48 Moss RB, Milla C, Colombo J, Accurso F, Zeitlin PL, Clancy JP, Spencer LT, Pilewski J, Waltz DA, Dorkin H, **Ferkol T**, Pian M, Ramsey B, Carter BJ, Martin DB, Heald AE: Repeated aerosolized AAV-CFTR for treatment of cystic fibrosis: a randomized placebo-controlled phase 2B trial. *Human Gene Therapy* 2007;18:726-32.
 - 49 Treggiari MM, Rosenfeld M, Mayer-Hamblett N, Retsch-Bogart G, Gibson RL, Williams J, Emerson J, Kronmal RA, Ramsey BW; **EPIC Study Group**: Early anti-pseudomonal acquisition in young patients with cystic fibrosis: rationale and design of the EPIC clinical trial and observational study. *Contemporary Clinical Trials*. 2009;**30**:256-68
 - 50 Hillian AD, Londono D, Dunn JM, Goddard KA, Pace RG, Knowles MR, Drumm ML; **CF Gene Modifier Study Group**: Modulation of cystic fibrosis lung disease by variants in interleukin-8. *Genes and Immunity* 2008;**9**:501-8.
 - 51 Bartlett JR, Friedman KJ, Ling SC, Pace RG, Bell SC, Bourke B, Castaldo G, Castellani C, Cipolli M, Colombo C, Colombo JL, Debray D, Fernandez A, Lacaille F, Macek M Jr, Rowland M, Salvatore F, Taylor CJ, Wainwright C, Wilschanski M, Zemková D, Hannah WB, Phillips MJ, Corey M, Zielenski J, Dorfman R, Wang Y, Zou F, Silverman LM, Drumm ML, Wright FA, Lange EM, Durie PR, Knowles MR; **Gene Modifier Study Group**: Genetic

- modifiers of liver disease in cystic fibrosis. *Journal of the American Medical Association* 2009;302:1076-83.
- 52 Berk DR, Ciliberto HM, Sweet SC, **Ferkol TW**, Bayliss SJ: Aquagenic wrinkling of the palms in cystic fibrosis: comparison with controls and genotype-phenotype correlations. *Archives of Dermatology* 2009;145:1296-9.
- 53 Schechter MS, McColley SA, Silva S, Haselkorn T, Konstan MW, Wagener JS; **Investigators and Coordinators of the Epidemiologic Study of Cystic Fibrosis**; North American Scientific Advisory Group for ESCF: Association of socioeconomic status with the use of chronic therapies and healthcare utilization in children with cystic fibrosis. *Journal of Pediatrics*. 2009;155:634-9.
- 54 Chen DL, Bedient TJ, Kozlowski J, Rosenbluth DB, Isakow W, **Ferkol TW**, Thomas B, Mintun MA, Schuster DP, Walter MJ: [18F]fluorodeoxyglucose positron emission tomography for lung antiinflammatory response evaluation. *American Journal of Respiratory and Critical Care Medicine* 2009;180:533-9.
- 55 **Ferkol T**, Zeitlin P, Abman S, Blaisdell CJ, O'Brodovich H: NHLBI Training Workshop report: the vanishing pediatric pulmonary investigator and recommendations for recovery. *Lung*. 2009;187:367-74.
56. McDonald S, Wilson DB, Pumbo E, Kulkarni S, Mason PJ, Else T, Bessler M, **Ferkol T**, Shenoy S. Acquired monosomy 7 myelodysplastic syndrome in a child with clinical features suggestive of dyskeratosis congenita and IMAGE association. *Pediatric Blood and Cancer*. 2010;54:154-7.
- 57 Gappa M, **Ferkol T**, Kovesi T, Landau L, McColley S, Sanchez I, Tal A, Wong GW, Zar H. Pediatric respiratory medicine--an international perspective. *Pediatric Pulmonology* 2010;45:14-24.
- 58* **Ferkol T**, Zeitlin P, Abman S, Blaisdell CJ, O'Brodovich H: NHLBI Training Workshop report: the vanishing pediatric pulmonary investigator and recommendations for recovery. *Pediatric Pulmonology*. 2010;45:25-33.
- 59 Farberman MM, Akers KT, Townsend RR, **Ferkol TW**: Airway proteins involved in bacterial clearance susceptible to cathepsin G proteolysis. *European Respiratory Journal*. 2010;35:410-7.
- 60 Buff SM, Caldwell SM, Yu H, Baatz JE, **Ferkol TW**, Flotte TR, Virella-Lowell IL: Adeno-associated vector delivery of IL-10 to the lungs of cystic fibrosis mice reduces inflammation due to *P. aeruginosa* infection. *Gene Therapy*. 2010;7:567-76.
- 61 Lie H, Zariwala MA, Helms C, Bowcock AM, Carson JL, Brown DE, Hazucha MJ, Forsen J, Molter D, Knowles MR, Leigh MW, **Ferkol T**: Primary ciliary dyskinesia in Amish communities. *Journal of Pediatrics*. 2010;156:1023-5.
- 62 Flume PA, Mogayzel PJ, Robinson KA, Rosenblatt RL, Quittell L, Marshall BC; **Clinical Practice Guidelines for Pulmonary Therapies Committee**: Cystic fibrosis pulmonary guidelines: pulmonary complications: hemoptysis and pneumothorax. *American Journal of Respiratory and Critical Care Medicine* 2010;182:298-306
- 63 Rosenfeld M, Emerson J, McNamara S, Joubran K, Retsch-Bogart G, Graff GR, Gutierrez HH, Kanga JF, Lahiri T, Noyes B, Ramsey B, Ren CL, Schechter M, Morgan W, Gibson RL; **EPIC Study Group Participating Clinical Sites**. Baseline characteristics and factors associated with nutritional and pulmonary status at enrollment in the cystic fibrosis EPIC observational cohort. *Pediatric Pulmonology*. 2010;45:934-44.
- 64 Farberman M, Joseph T, Akers K, Medina-Garcia R, Seth Crosby S, Clarke LL, Brody SL, **Ferkol TW**: Expression and polarized release of CXCL-chemokines from differentiated primary cultures of wild type and cystic fibrosis murine airway epithelial cells. *American Journal of Respiratory Cell and Molecular Biology*. In press.
- 65 Olin JT, Burns K, Metjian H, Carson JL, Davis SD, Dell SD, **Ferkol TW**, Milla CE, Olivier KN, Rosenfeld M, Baker B, Leigh MW, Knowles MR, Sagel SD: Diagnostic yield of nasal scrape biopsies in primary ciliary dyskinesia: a multicenter experience. *Pediatric Pulmonology*. In press.
- 66 Rivera-Spoljaric K, Duhig S, Krauss MJ, Lee P, **Ferkol TW**, Strunk RC, McLeod HL: Perspectives on genetics and pharmacogenetics in surrogate decision makers among caregivers of children with asthma. *Submitted for publication*.

- 67 Ogborn AC, Sweet S, Hachem R, **Ferkol T**, White F, Faro F: The use of bronchiolitis obliterans syndrome criteria to identify bronchiolitis obliterans in pediatric lung transplant recipients. *Submitted for publication*.
- 68 Buff SM, Yu H, McCall JN, Caldwell SM, **Ferkol TW**, Flotte TR, and Virella-Lowell IL: IL-10 delivery by adeno-associated vector attenuates inflammation in mice with *Pseudomonas pneumonia*. *Submitted for publication*.

Reviews and Editorials

- 1 **Ferkol TW**, Look DW: Chinks in the armor of the airway – *Pseudomonas* infection in the cystic fibrosis lung. *American Journal of Respiratory Cell and Molecular Biology*. 2001;25:11-13.
- 2 Richard JC, Chen DL, **Ferkol T**, Schuster DP: Molecular imaging for pediatric lung diseases. *Pediatric Pulmonology*. 2004;37:286-96.
- 3 **Ferkol T**, Rosenfeld M, Milla CE: Cystic fibrosis pulmonary exacerbations. *Journal of Pediatrics*. 2006;148:259-64.
- 4 **Ferkol T**, Leigh M: Neonatal manifestations of primary ciliary dyskinesia. *Seminars in Perinatology*. 2006;30:335-40.
- 5 **Ferkol T**, Bush, A: Movement: the emerging genetics of primary ciliary dyskinesia. *American Journal of Respiratory and Critical Care Medicine*. 2006;174:109-10.
- 6 **Ferkol T**, Mitchison H, O'Callaghan C, Leigh M, Carson J, Lie H, Rosenbluth D, Brody SL: Current issues in the basic mechanisms, pathophysiology, diagnosis, and management of primary ciliary dyskinesia. *European Respiratory Monograph*. 2006;37:291–313.
- 7 Lie H, **Ferkol T**: Primary ciliary dyskinesia: recent advances in pathogenesis, diagnosis and treatment. *Drugs*. 2007;67:1883-92.
- 8 Elizur A, Cannon C, **Ferkol T**: Inflammation in the cystic fibrosis lung. *Chest*. 2008;133:489-95.
- 9 Leigh MW, Pittman JE, Carson JL, **Ferkol TW**, Dell SD, Davis SD, Knowles MR, Zariwala MA: Clinical and genetic aspects of primary ciliary dyskinesia and Kartagener syndrome. *Genetics and Medicine*. 2009;11:473-87.
- 10 Davis SD, **Ferkol TW**: Hitting the target: new treatments for cystic fibrosis. *American Journal of Respiratory and Critical Care Medicine*. *In press*.
- 11 **Ferkol T**, Leigh M: Pediatric ciliopathies. *Journal of Pediatrics*. *In preparation*.

Book Chapters

- 1 Kercksmar CM **Ferkol TW**: Respiratory distress. In Kliegman RM, Nieder ML, Super DM, eds. *Practical Strategies in Pediatric Diagnosis and Therapy*, first edition. Philadelphia, PA: WB Saunders. 1996; pp 93-115.
- 2 Flotte T, **Ferkol TW**: Genetic therapy. In Koren G, Bailey B, eds. *Clinical Pharmacology, Pediatric Clinics of North America*; 1997;44:153-78.
- 3 **Ferkol TW**, Davis PB: Bronchiectasis and bronchiolitis obliterans. In Taussig LM, Landau LI, eds. *Textbook of Pediatric Respiratory Medicine*. St. Louis, MO: Mosby Year Book. 1998; pp 784-93.
- 4 Ziady A-G, **Ferkol TW**: DNA complexes and receptor-mediated gene transfer. In Meager A, ed. *Gene Therapy Technologies and Regulations*. Toronto, Canada: Wiley. 1999; pp 13-34.
- 5 Kercksmar CM, **Ferkol TW**: Respiratory Distress. In Kliegman RM, Greenbaum, LA, and Lye, PS, eds. *Practical Strategies in Pediatric Diagnosis and Therapy*, second edition. Amsterdam, Netherlands: Elsevier. 2004; pp 95-117.
- 6 **Ferkol T**, Israel E, Wechsler M: Specialized designs: Pharmacogenomics and gene therapy. In Schuster D, Powers W, eds. *Translational and Experimental Medicine*. Philadelphia, PA: Lippincott, Williams, and Wilkins. 2005; pp. 223-37.
- 7 Sands M, Nolta JA, Bauer G, and **Ferkol T**: Preparing for gene therapy studies. In D. Schuster and W. Powers, eds: *Translational and Experimental Medicine*. Philadelphia, PA: Lippincott, Williams, and Wilkins. 2005; pp 237-47.

- 8 Coste F, **Ferkol T**: Cystic fibrosis. In Wong E, Bennett M, Dietzen D, eds. *Biochemical and Molecular Basis of Pediatric Disease*, fourth edition. Washington DC: AACCC Press. 2010. *In press*.
- 9 **Ferkol T**: Primary ciliary dyskinesia. In Behrman RE, Kliegman RM, Jenson HB, eds. *Nelson's Textbook of Pediatrics*. Philadelphia, PA: Elsevier Health Sciences. *In press*.
- 10 Faro A, Michelson P, **Ferkol T**: Pulmonary disease in cystic fibrosis. In Chernick V, Boat T, Wilmott R, Bush A, eds. *Disorders of the Respiratory Tract in Children*, eighth edition. Philadelphia, PA: Elsevier Health Sciences. *In press*.

Book Reviews

1. **Ferkol T**: *Diseases of the Bronchioles*. Epler GR, ed. *Pediatric Pulmonology*. 1994;19:249.
2. **Ferkol T**: *Cystic Fibrosis in Adults*. Yankaskas JR, Knowles MR, eds. *New England Journal of Medicine*. 2000;342:64.

Lay Articles

1. **Ferkol T** and Cannon C: Newborn screening offers hope to cystic fibrosis patients. *St. Louis Post-Dispatch*. October 18, 2004.
2. **Ferkol T**: Inflammation in the cystic fibrosis lung. *SVB*. 2008;32:18-20.

BIOTECHNOLOGY AND PATENTS

Scientific co-founder, Copernicus Pharmaceuticals

Compacted Nucleic Acids and their Delivery into Cells.

US patent number 5,844,107 (continuations: 5,877,302, 6,008,336, and 6,077,835)

Australia Patent number: 696455

Original Issue date: December 1, 1998

Inventors: Richard W. Hanson, Jose C. Perales, and Thomas W. Ferkol.

The Delivery of Nucleic Acids to Cells.

US patent number 5,972,900

Original Issue date: October 29, 1999

Inventors: Thomas W. Ferkol and Pamela B. Davis.

Serpin Enzyme Complex Receptor-mediated Gene Transfer.

US patent number 5,972,901 (continuation: 6,200,801)

Australia patent number: 720223

Original Issue date: October 26, 1999

Inventors: Assem-Galal Ziady, Pamela B. Davis, and Thomas W. Ferkol.

Fusion Proteins for Protein Delivery.

US patent number 6,072,041 (continuation: 6,287,817)

Original Issue date: June 6, 2000

Inventors: Thomas W. Ferkol, Elizabeth Eckman, Pamela B. Davis, John Schreiber, and John Luk.

Bifunctional Molecules for Delivery of Therapeutics.

US patent number 6,261,787

Australia Patent number: 773,715

Original Issue date: July 6, 2001

Inventors: Thomas W. Ferkol, Elizabeth Eckman, Pamela B. Davis.