



- *Silverstein Chair, Department of Pediatrics*
- *Professor of Pediatrics*

Conditions Treated:

- *Bronchopulmonary Dysplasia*
- *Congenital Anomalies of the Respiratory System*
- *Central Sleep Apnea*
- *Chronic Respiratory Failure*
- *Obstructive Sleep Apnea (OSA)*
- *Pneumonia*
- *Chronic Cough*
- *Cystic Fibrosis (CF)*
- *Bronchiectasis Overview*

Research Areas:

- *Cystic Fibrosis (CF)*

Programs & Services:

- *Spirometry Testing*
- *Asthma Treatment Programs (Pediatric)*
- *Allergy & Asthma Program (Pediatric)*
- *Pulmonary Diagnostic Center (Pediatric)*
- *Outpatient Clinic (Pediatric)*
- *National Jewish Health for Kids / Pediatric Programs*
- *Department of Pediatrics*
- *Ambulatory Pediatrics*
- *Severe Asthma Clinic (Pediatric)*
- *Division of Pediatric Pulmonary Medicine*
- *Exercise & Performance Breathing Center*
- *Respiratory Treatment Programs*

My main area of expertise is in translational research in cystic fibrosis with a focus on chloride channels, protein chaperones, F508del pathophysiology and protein rescue in CF. I also have a role in pediatric asthma research. I have conducted investigator-initiated trials of 4-phenylbutyrate as a corrector in CF, anti-inflammatories in CF, Adeno-associated Viral gene therapy in CF, and many others. I held the IND for 4-phenylbutyrate for CF and hold the INDs for digitoxin and glycerolphanylbutyrate in CF. I also am a basic science investigator working in the area of chloride channels, proteomics, and protein trafficking. My laboratory is a translational environment where graduate students, clinical fellows, postdoctoral fellows and faculty can work collaboratively to advance our fundamental knowledge about CF airways disease.

Board Certification

2006: Recertification, Diplomate Pediatric Pulmonary, 2007-2017

1992: Diplomate of Pediatric Pulmonology, American Board of Pediatrics, recertified 1998 until 2006

1988: American Board of Pediatrics, Permanent Certificate

Education

1972 - 1976 Stanford University, BS in Biology

1976 - 1980 Yale, MPhil in Cell Biology

1976 - 1983 Yale, MD

1976 - 1983 Yale, PhD

Residency

1984 - 1986 The Johns Hopkins Hospital, Pediatrics

Fellowship

1986 - 1988 The Johns Hopkins Hospital, Pediatric Pulmonology

Teaching or Professional Positions

2001-2016: Professor of Pediatrics, Johns Hopkins University School of Medicine

1994-2001: Associate Professor of Pediatrics, Johns Hopkins University School of Medicine

1989-1994: Assistant Professor of Pediatrics, Johns Hopkins University School of Medicine

1988-1989: Instructor in Pediatrics, Johns Hopkins University School of Medicine

Professional Memberships

National Societies:

American Association for the Advancement of Science

American Thoracic Society (Associate) Chair, Pediatric Assembly (5/2007-5/2009)

American College of Chest Physicians (Fellow)

American Physiological Society

Local Societies:

Maryland Lung Association

National Scientific Committees:

Question Writing Committee, General Pediatrics, American Board of Pediatrics (2013-present)

Member, Lung Cellular and Molecular Immunology study section (2008-2012)

Gilead Sciences Research Scholars Program review committee (2011)

Member, CRR, NCRR, GCRC study section (2003-2007)

Chair-Elect, Subboard of Pediatric Pulmonology, American Board of Pediatrics

Chair, Pediatric Program Subcommittee of the American Thoracic Society

Subboard of Pediatric Pulmonology, American Board of Pediatrics (1999 - 2005)

National Institutes of Health Medical Biochemistry Study Section (1996- 2000)

National Institutes of Health, Special Emphasis Panels, Program Project Reviews (1994-96)

International Scientific Committees:

American Thoracic Society Pediatric Planning Committee (2010-present)

American Thoracic Society Pediatric Program Committee Chair Elect (2007)

American Thoracic Society Program Review Committee (2004-05)

Canadian Cystic Fibrosis Foundation Scientific Review Committee (2000-2003)

American Thoracic Society Program Planning Committee (2002)

Local Scientific Committees:

Maryland Lung Association, Executive Committee (1998-2000)

Maryland Lung Association, awards and grant committee (1991-95)

Awards & Recognition

2015-2016: Best Doctor's in America - Best Doctor's Inc.

2012: Elizabeth Rich Award, American Thoracic Society

2007: George Will Comstock Award, Maryland Thoracic Society

2006: Maryland Innovator of the Year

1988: Young Investigators' Certificate of Merit, The Johns Hopkins University School of Medicine

1983: Outstanding M.D./Ph.D. Student Award, Yale University

1972: Presidential Scholar for State of Hawaii

Publications

Henry KR, Lee S, Walker D, Zeitlin PL. Direct interactions between ENaC gamma subunit and CICN2 in cystic fibrosis epithelial cells. *Physiol Rep.* 2015 Jan 27;3(1). pii: e12264. doi: 10.14814/phy2.12264. Print 2015 Jan 1.

Mayer-Hamblett N, Rosenfeld M, Treggiari MM, Konstan MW, Retsch-Bogart G, Morgan W,

Wagener J, Gibson RL, Khan U, Emerson J, Thompson V, Elkin EP, Ramsey BW; EPIC; ESCF Investigators (Zeitlin PL). Standard care versus protocol based therapy for new onset *Pseudomonas aeruginosa* in cystic fibrosis. *Pediatr Pulmonol*. 2013 Oct;48(10):943-53.

Kerem E, Konstan MW, De Boeck K, Accurso FJ, Sermet-Gaudelus I, Wilschanski M, Elborn JS, Melotti P, Bronsveld I, Fajac I, Malfroot A, Rosenbluth DB, Walker PA, McColley SA, Knoop C, Quattrucci S, Rietschel E, Zeitlin PL, Barth J, Elfring GL, Welch EM, Branstrom A, Spiegel RJ, Peltz SW, Ajayi T, Rowe SM; for the Cystic Fibrosis Ataluren Study Group. Ataluren for the treatment of nonsense-mutation cystic fibrosis: a randomised, double-blind, placebo-controlled phase 3 trial. *Lancet Respir Med*. 2014 May 15. pii: S2213-2600(14)70100-6. In press.

Lee S, Henderson MJ, Schiffhauer E, Despanie J, Henry K, Kang PW, Walker D, McClure ML, Wilson L, Sorscher EJ, Zeitlin PL. Interference with ubiquitination in CFTR modifies stability of core glycosylated and cell surface pools. *Mol Cell Biol*. 2014 Apr 28. [Epub ahead of print] PMID: PMC4097669.

Schiffhauer, E, Vij N, Kovbasnjuk, O, Kang PW, Walker D, Lee S, Zeitlin, PL. Dual activation of CFTR and CLCN2 by lubiprostone in murine nasal epithelial. *Am J Physiol Lung Cell Mol Physiol* 2013 Mar 1;304(5):L324-31.

Doctor's Contact Information

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Locations

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