

CURRICULUM VITAE
Stephanie Duggins Davis, M.D.
July 2009

EDUCATION:

1996-1999 James Whitcomb Riley Hospital for Children
Indiana University Medical Center
Director: Howard Eigen, M.D.
Fellowship: Pediatric Pulmonary

1993-1996 James Whitcomb Riley Hospital for Children
Indiana University Medical Center
Chairman: Richard Schreiner, M.D.
Residency: Pediatrics

1989-1993 Bowman Gray Medical School
Wake Forest University
Winston-Salem, North Carolina
Degree: Doctor of Medicine
May 17, 1993

1985-1989 University of North Carolina
Chapel Hill, North Carolina
Degree: Bachelor of Science in Biology
May 14, 1989

PROFESSIONAL EXPERIENCE:

2009-present Division Chief of Pediatric Pulmonology
University of North Carolina at Chapel Hill
Date of appointment: July 1, 2009

2007-present Fellowship Program Director
University of North Carolina at Chapel Hill
Date of appointment: July 1, 2007

2006-present Associate Professor of Pediatrics
University of North Carolina at Chapel Hill
Date of appointment: August 15, 2006

1999 - 2006 Assistant Professor of Pediatrics
University of North Carolina at Chapel Hill
Date of appointment: August 16, 1999

CERTIFICATION/LICENSURE:

Certification: Pediatric Pulmonology: certified: August 7, 2000 (#00610)
recertified: October 31, 2007

American Board of Pediatrics: certified, October 9, 1996 (#058486)
recertified: August 29, 2002

Diplomate, National Board of Medical Examiners: 1994, (#437274)

Licensure: North Carolina (#9900470) 1999- present
Indiana (#01044048) 1997-1999

HONORS AND AWARDS:

2009	Academic Leadership Program University of North Carolina at Chapel Hill
2006	Society of Pediatric Research University of North Carolina at Chapel Hill
1998	Alpha Omega Alpha Indiana University School of Medicine
1997	Distinguished Residents and Fellows Asthma Education Scholarship Program London, England
1993	C.B. Deane Memorial Award Bowman Gray School of Medicine
1989	Phi Beta Kappa University of North Carolina at Chapel Hill
1987	Phi Eta Sigma (Freshman Honor Society) University of North Carolina at Chapel Hill

BIBLIOGRAPHY

Book Chapters:

1. **Davis, S**, Gappa, M, Rosenfeld, M. Respiratory Mechanics. Paediatric Pulmonary Function Testing, Prog. Respir Res, Basel, Karger, 2005; 33: 20-33.
2. **Davis S**, Pittman J. Lung Function Testing in Infants. Cystic Fibrosis, 2009; in press.

Refereed Articles:

1. Leigh MW, Pittman JE, Carson JL, Ferkol TW, Dell SD, **Davis SD**, Knowles MR, Zariwala MA. Clinical and Genetic Aspects of Primary Ciliary Dyskinesia/Kartagener Syndrome; *Genetics in Medicine* 2009; in press.
2. Peterson-Carmichael S, Harris WT, Goel R, Noah TL, Johnson R, Leigh M, **Davis SD**. The Association of Lower Airway Inflammation with Physiologic Findings in Young Children with Cystic Fibrosis; *Pediatr Pulmonol* 2009, May;44(5):503-11.

3. Davis SD, Ratjen F. Reduced Lung Function in Cystic Fibrosis: A primary or secondary phenotype? (editorial); *Am J Respir Crit Care Med* 2008; 178 (1): 2-3.
4. Davis S, Aurora P, Eigen H, Beydon N, Lombardi E on behalf of the ATS/ERS Working Group on Infant and Young Children Pulmonary Function Testing. Quality Control for Spirometry in Preschool Children (author correspondence); *Am. J. Respir. Crit. Care Med.*, Jul 2008; 178: 107 - 108.
5. Dellon EP, Donaldson SH, Johnson R, **Davis SD**. Safety and Tolerability of Inhaled Hypertonic Saline in Young Children with Cystic Fibrosis; *Pediatr Pulmonol.* 2008; Nov;43(11):1100-6.
6. **Davis SD**, Johnson RC, Flucke RL, Kisling JA, Myers TR. AARC Clinical Practice Guideline: Infant/Toddler Pulmonary Function Tests; *Respiratory Care.* 2008, July 53 (7): 929-945.
7. Brown DE, Pittman JE, Leigh MW, Fordham L, **Davis SD**. Early Lung Disease in Young Children with Primary Ciliary Dyskinesia; *Pediatr Pulmonol.* 2008; 2008 May;43(5):514-6.
8. Esther CR, Alexis NE, Clas ML, Lazarowski ER, Donaldson SH, Pedrosa Ribeiro CM, Moore CG, **Davis SD**, Boucher RC. Extracellular Purines are Biomarkers of Neutrophilic Airway Inflammation. *Eur Respir J.* 2008 May;31(5):949-56.
9. **Davis SD**, Brody AS, Emond MJ, Brumback LC, Rosenfeld M. Endpoints for Clinical Trials in Young Children with Cystic Fibrosis. *Proceedings of the American Thoracic Society* 2007; Aug 1;4(4):418-30.
10. Beydon N; **Davis SD**; Lombardi E; Allen JL, Arets HGM, Aurora P, Bisgaard H, Davis GM, Ducharme F, Eigen H, Gappa M, Gaultier C, Gustafsson PM, Hall GL, Hantos Z, Healy MJR, Jones MH, Klug B, Lodrup Carlsen KC, McKenzie SA, Marchal F, Mayer OH, Merkus PJFM, Morris MG, Oostveen E, Pillow JJ, Seddon PC, Silverman M, Sly PD, Stocks J, Tepper RS, Vilozni D, Wilson NM, on behalf of the ATS/ERS Working Group on Infant and Young Children Pulmonary Function Testing. An Official American Thoracic Society/European Respiratory Society Statement: Pulmonary Function Testing in Preschool Children. *Am J Respir Crit Care Med* 2007; 175: 1305-1345.
11. **Davis, SD**, Fordham, LA, Noah, TL, Retsch-Bogart, GZ, Qaqish, B, Yankaskas, BC, Johnson, RC, Leigh, MW. HRCT abnormalities reflect BALF inflammation and track changes in early CF. *Am J. Respir Crit. Care Med* 2007; 175(9):943-50.
12. Saito J, Harris T, Gelfond J, Noah T, Leigh M, Johnson R, **Davis S**. Physiologic, Bronchoscopic and Bronchoalveolar Lavage Fluid Findings in Young Children with Recurrent Wheeze and Cough. *Pediatr Pulmonol.* 2006; 41: 709-719.
13. The ATS/ERS Working Group on Infant and Young Children Pulmonary Function Testing Consensus Statement. (Member). Raised volume forced expirations in infants: guidelines for current practice. *Am J Respir Crit Care Med.* 2005; 172: 1463-1471.
14. Jones M, Howard J, **Davis S**, Kisling J, Tepper R. Sensitivity of Spirometric Measurements to Detect Airway Obstruction in Infants. *Am. J. Respir. Crit. Care Med.* 2003; 167: 1283-1286.
15. Goldstein A, Castile R, **Davis S**, Filbrun D, Flucke R, McCoy K, Tepper R. Bronchodilator Responsiveness in Normal Infants and Young Children. *Am J Respir Crit Care Med.* 2001; 164: 447-454.
16. **Davis S**, Jones M, Kisling J, Howard J, Tepper R. Comparison of normal infants and infants with cystic fibrosis using forced expiratory flows breathing air and heliox. *Pediatr Pulmonol.* 2001; 31(1): 17-23.

17. Jones M, **Davis S**, Kisling J, Howard J, Castile R, Tepper R. Flow Limitation in Infants Assessed by Negative Expiratory Pressure. *Am J Respir Crit Care Med.* 2000; 161: 713-717.
18. Jones M, Castile R, **Davis S**, Kisling J, Filbrun D, Flucke R, Goldstein A, Emsley C, Ambrosius W, Tepper R. Forced Expiratory Flows and Volumes in Infants: Normative Data and Lung Growth. *Am J Respir Crit Care Med.* 2000; 161: 353-359.
19. **Davis S**, Jones M, Kisling J, Castile R, Tepper R. Density Dependence of Forced Expiratory Flows in Healthy Infants and Toddlers. *J Appl. Physiol.* 1999; 87(5): 1796 - 1801.
20. Tepper RS, Jones M, **Davis S**, Kisling J, and Castile R. Rate Constant for Forced Expiration Decreases with Lung Growth During Infancy. *Am J Respir Crit Care Med.* 1999; 160: 835-838.
21. Jones MH, **Davis SD**, Grant D, Christoph K, Kisling J, Tepper RS. Forced Expiratory Maneuvers in Very Young Children Assessment of Flow Limitation. *Am J Respir Crit Care Med.* 1999;159:791-795.
22. **Davis S**, Jones M, Kisling J, Angelicchio C, Tepper RS. Effect of Continuous Positive Airway Pressure on Forced Expiratory Flows in Infants with Tracheomalacia. *Am J Respir Crit Care Med.* 1998;158:148-152.

Review Articles:

1. **Davis SD**, Pittman J. Measurement of Early Lung Disease in Children with Cystic Fibrosis. *eCysticFibrosis Review* January 2009 Volume 1, Issue 5.
2. **Davis SD**, Rosenfeld M. Using Diagnostic Tools in the Young Child: X-rays and Pulmonary Function. *Pediatr Pulmonol.* 2007, Suppl 30.
3. Dellon E, **Davis SD**. Catch Me If You Can. *ADVANCE for Managers of Respiratory Care.* 2007; 16 (6): 34.
4. Peterson-Carmichael, S, **Davis S**. Debunking the Myth. *ADVANCE for Managers of Respiratory Care.* 2007; 16(1): 63.
5. Rosenfeld M, **Davis SD**. Infant Pulmonary Function Tests as Outcome Measures for Clinical Trials. *Pediatr Pulmonol.* 2006; Suppl 29: S18.2.
6. **Davis, S**, Preschool Spirometry. *Pediatric Respiratory Review*, 2006, 7S, S11-S13.
7. **Davis, S**. Neonatal and Pediatric Respiratory Diagnostics. *Respiratory Care*, 2003; 48(4): 367-385.
8. **Davis S**. Clinical Utility of Heliox. *ADVANCE for Managers of Respiratory Care.* 2000; 9(5): 52-56.

Editor:

Guidelines for Preschool Lung Function Testing: Series of 8 papers submitted as one large manuscript to *Am J Respir Crit Care Med* (Refereed article 4):

Lung Function Testing in Preschool Children: The Next Frontier
 Clinical Implications of Pulmonary Function Testing in Preschool Children
 The Interrupter Technique in Preschool Children
 The Forced Oscillation Technique in Preschool Children
 Assessment of Tidal Breathing Parameters in Preschool Children
 Preschool Spirometry Guidelines
 The Multiple Breath Inert Gas Washout (MBW) Technique in Preschool Children
 Bronchial Responsiveness Tests in Preschool Children

Refereed Abstracts:

1. Leigh MW, Ferkol TW, Dell SD, **Davis SD**, Knowles MR. Primary Ciliary Dyskinesia in Children: Dichotomy in Structural Versus Functional Changes in Airways. *Am. J. Respir. Crit. Care Med.*, Apr 2009; 179: A3674.
2. Pittman JE, **Davis SD**. Spirometry in Biracial Children: Assessing Adequacy of Current Race-Based Reference Equations. *Am. J. Respir. Crit. Care Med.*, Apr 2009; 179: A4850.
3. Kerby GS, Rosenfeld M, Ren C, Mayer O, Castile R, Hart M, Hiatt P, Kloster M, Brumback L, Johnson R, **Davis SD**. Multi-center lung function testing in preschool subjects; *Ped Pulm Supp.* 31 (abstracts issue) October 2008
4. Rosenfeld M, **Davis SD**, Brumback L, Daniel S, Johnson R, Rowbotham R, McNamara S, Martin S, Barlow C, Ratjen F. Inhaled 7% Hypertonic Saline is Well Tolerated in Infants and Toddlers with CF. *Ped Pulm Supp.* 31 (abstracts issue) October 2008:
5. Pittman J, Calloway E, Yeatts J, Drumm M, Leigh M, **Davis S**, Van Rie A, Emond M, Knowles M. Age of Pseudomonas aeruginosa Infection and Severity of Lung Disease in Cystic Fibrosis Adolescents and Adults. *Ped Pulm Supp.* 31 (abstracts issue) October 2008: A332, p. 319.
6. Ayala GX, Sleath B, **Davis S**, Williams D, Yeatts K, Washington D; Child and caregiver question-asking and input into asthma management regimens during pediatric visits; International Conference on Communication in Healthcare; Oslo, Norway
7. Sleath B, Ayala GX, Williams D, **Davis S**, Yeatts K, Washington D; Provider question asking about asthma controller medications during pediatric asthma visits; International Conference on Communication in Healthcare; Oslo, Norway
8. Huda W, Fordham LA, Frey GD, **Davis S**; Effective Doses to Pediatric Cystic Fibrosis Patients Undergoing Chest CT Examinations. American Association of Physicists in Medicine, July 27-31, 2008
9. Pittman JE, **Davis SD**, Chawla KK, Brown DE, Knowles MR, Leigh MW. Primary Ciliary Dyskinesia: Characteristics of Children under Six. *Proceedings of the American Thoracic Society*; 2008, A798.
10. Dellon E, Donalson S, Johnson R, **Davis S**; Safety and Tolerability of Hypertonic Saline in Infants and Young Children with Cystic Fibrosis; *Pediatric Pulmonology*, 2007, Suppl 30; 298.
11. **Davis, S**, Kerby, G, Acton, J, Castile, R, Colin, A, Conrad, C, Hart, M, Hiatt, P, Mogayzel, P, Johnson, R, Wilcox, S, Knutzen, S, Brumback, L, Rosenfeld, M. Feasibility, Sensitivity and Variability of Adult-Type Pulmonary Function Tests in Infants with CF in a Multicenter, Longitudinal Trial; *Pediatric Pulmonology*, 2006, Suppl 29; 360.
12. Dellon E, Donalson S, Johnson R, **Davis S**; Safety and Tolerability of Hypertonic Saline in Young Children with Cystic Fibrosis; *Pediatric Pulmonology*, 2006, Suppl 29; 283.
13. Rosenfeld M, Brumback L, Knutzen S, Acton J, Castile R, Colin A, Conrad C, Hart M, Hiatt P, Kerby G, Mogayzel P, Johnson R, Wilcox S, **Davis SD**. Multicenter Longitudinal Evaluation of Raised Volume Forced Expiratory Flows in Infants with CF is Feasible; *Pediatric Pulmonology*, 2005, Suppl 28; 354.
14. **Davis SD**, Peterson-Carmichael S, Noah T, Johnson R, Abode K, Leigh M. Correlation of Infant Lung Function and Bronchoalveolar Lavage Fluid (BALF) Data in CF Infants; *Pediatric Pulmonology*, 2005, Suppl 28; 336.

15. **Davis SD**, Kerby G, Acton J, Castile R, Colin A, Conrad C, Hart M, Hiatt P, Mogayzel P, Brumback L, Johnson R, Wilcox S, Wohl ME, Rosenfeld M. Creating an Infant Lung Function Testing Network. *Pediatric Pulmonology*, 2004, Suppl 27; 329.
16. **Davis SD**, Fordham LA, Noah TL, Retsch-Bogart GZ, Qaqish B, Yankaskas BC, Johnson RC, Leigh MW. HRCT abnormalities reflect BALF inflammation and track changes in early CF. *Pediatric Pulmonology*, 2004, Suppl 27; 328.
17. Saito J, Johnson R, Noah T, Leigh M, **Davis S**. Correlation of Physiologic Markers versus Flexible bronchoscopy Findings in Infants with Recurrent Wheeze and Cough. *Am J Respir Crit Care Med*. 2004; 164 (7): A489
18. **Davis SD**, Fordham LA, Retsch-Bogart G, Noah T, Johnson R, Abode K, Leigh M. Detecting and Tracking CF Lung Disease using HRCT and BAL in Infants. *Pediatric Pulmonology*, 2002; Suppl 24: A 374.
19. Harris W, Wood R, **Davis S**, Retsch-Bogart G, Leigh M. Chronic/Recurrent Wheezing In Infants And Young Children: A Bronchoscopic Study. *Pediatric Research*, 2000. 47: 477A
20. Tepper RS, **Davis S**, Jones M, Kisling J, Payne N. Changes In Full Forced Expiratory Flow Volume Maneuvers During Bronchial Challenge Testing In Infants. *Eur Respir J* 1999.
21. Goldstein A, Castile R, **Davis S**, Filbrun D, Flucke R, Tepper R, McCoy K. Bronchodilator Responsiveness in Infants with Cystic Fibrosis. *Peds Pulmon Suppl* 19: 279, 1999.
22. Goldstein A, Castile R, **Davis S**, Filbrun D, Flucke R, McCoy K, Tepper R. Bronchodilator Responsiveness in Normal Infants. *Am J Respir Crit Care Med*. 1999;195(3)pt2: A674.
23. **Davis S**, Jones M, Kisling J, Howard J, Tepper RS. Comparison of normal and cystic fibrosis (CF) infants using forced expiratory flows breathing heliox. *Am J Respir Crit Care Med*. 1999;159(3)pt2:A504.
24. Jones M, Castile R, **Davis S**, Goldstein A, Filbrun D, Kisling J, Fluck R, Tepper R. Forced expiratory maneuvers in normal infants: normative values. *Am J Respir Crit Care Med*. 1999;159(3)pt2:A504.
25. Tepper RS, Jones M, **Davis S**, Kisling J, Howard J, Castile R. The Time Constant from Forced Expiratory Flow Volume Curves Increases with Lung Growth During Infancy. *EurRespir J*. 1998;12(28):155(#0204).
26. **Davis S**, Jones M, Kisling J, Castile R, Tepper RS. Density Dependence of Forced Expiratory Flows in Healthy Infants. *Am J Respir Crit Care Med*. 1998;157(3):A470.
27. Jones M, **Davis S**, Kisling J, Castile R, Tepper RS. Negative Expiratory Pressure to Assess Flow Limitation in Infants. *Am J Respir Crit Care Med*. 1998;157(3):A471.
28. Tepper RS, **Davis S**, Jones M, Kisling J. The Effect of CPAP on Forced Expiratory Flows in Healthy Infants. *Eur Respir J*. 1997; 10(25):167s(#1148).
29. Jones M, **Davis S**, Grant D, Christoph K, Tepper RS. Negative Pressure to Assess Flow Limitation in Very Young Children. *Am J Respir Crit Care Med*. 1997;155(4)pt2:A376.
30. **Davis S**, Jones M, Kisling J, Angelicchio C, Tepper RS. Effect of Continuous Positive Airway Pressure (CPAP) on Forced Expiratory Flows of Infants with Tracheomalacia. *Am J Respir Crit Care Med*. 1997;155(4)pt2:A376.

Invited Workshops:

1. Advancing Rare Diseases Research through Networks and Collaboration; July 2009; National Institute of Health

2. Care of Patients with CF Diagnosed by Newborn Screening; July 2007; Cystic Fibrosis Foundation
3. Preventing Respiratory Sequelae in Children Diagnosed with Cystic Fibrosis by Newborn Screening; February 2007; European Respiratory Society; Belgium
4. Imaging Endpoints for Cystic Fibrosis Clinical Trials; September 2005.
5. HRCT Special Interest Group Conference; October 2003; North American Cystic Fibrosis Conference

TEACHING RECORD

National/International:

- | | |
|------|--|
| 2009 | Featured Speaker, American Thoracic Society Annual Conference
Lecture: <i>The Value of Monitoring Lung Function throughout the Pediatric Age</i> |
| 2009 | Moderator, American Thoracic Society Annual Conference
Mini-Symposium: Best of Pediatrics |
| 2009 | Invited Speaker, Cystic Fibrosis Therapeutic Development Network
Lecture: <i>Review of Current Status of Studies Restoring Airway Surface Liquid</i> |
| 2008 | Invited Speaker, CHEST
9 th Pediatric Fellows Conference
Lecture: <i>Pulmonary Function Testing as Applied to the Wheezing Infant</i> |
| 2008 | Invited Speaker, Duke Airway Biology Forum
Lecture: <i>Infant Pulmonary Function Testing State of Art</i> |
| 2008 | Invited Speaker, American Thoracic Society Annual Conference, Clinical Workshop
Lecture: <i>Implementing Infant Pulmonary Function Testing into Clinical Practice</i> |
| 2008 | Moderator and featured speaker, American Thoracic Society Annual Conference
Lecture: <i>Clinical and Research Outcome Measures of CF Lung Disease</i> |
| 2008 | Invited Speaker, Cincinnati Children's Hospital
Lecture: <i>Infant PFTs as a Clinical Outcome Measures: Are we there yet?</i> |
| 2007 | Invited Speaker, CHEST
9 th Pediatric Fellows Conference
Lecture: <i>Pulmonary Function Testing as Applied to the Wheezing Infant</i> |
| 2007 | Invited Speaker, North American Cystic Fibrosis Conference Symposium
Lecture: <i>Using Diagnostic Tools in the Young Child: X-rays and Pulmonary Function</i> |
| 2007 | Facilitator, American Thoracic Society Annual Conference
Thematic Poster Session: Cystic Fibrosis: Translational and Clinical Science |
| 2007 | Invited Speaker, American Thoracic Society Annual Conference
Lecture: <i>Infant Pulmonary Function Testing: Is There a Role in Early Wheezing?</i> |
| 2007 | Session Chair, American Thoracic Society Annual Conference
Postgraduate Course, Lung Function Testing in Young Children: Clinical and Research Applications |
| 2007 | Invited Speaker, Indiana University School of Medicine
Lecture: <i>Detecting Early Cystic Fibrosis Lung Disease</i> |
| 2006 | Co-Chair and Speaker, North American Cystic Fibrosis Conference
Symposium: <i>Measuring Early CF Lung Disease</i> |
| 2006 | Invited Speaker, North American Cystic Fibrosis Conference |

- Course: Introduction to CF Clinical Research
Lecture: *Data and Specimen Banking*
- 2006 Invited Speaker, CHEST
Lecture: Advances in Infant Pulmonary Function Testing
- 2006 Invited Speaker, CIPP (Congress of International Pediatric Pulmonology)
Postgraduate Course, Assessment of Lung Function in Preschool Children
Lecture: *Preschool Spirometry*
- 2006 Moderator and Featured Speaker, American Thoracic Society Annual Conference
Lecture: *Recent progress and clinical applicability of infant lung function testing*
- 2006 Sunrise Seminar, American Thoracic Society Annual Conference
Lecture: *Incorporating Infant PFTs into Clinical Practice*
- 2006 Invited Speaker, FOCUS on Respiratory Care & Sleep Medicine Conference
Lecture: *Evaluating Respiratory Function in Children*
- 2005 Moderator and Featured Speaker, American Thoracic Society Annual Conference
Lecture: *Advances in Assessment and Treatment of CF Lung Disease*
- 2005 Facilitator, American Thoracic Society Annual Conference
Thematic Poster Session: *Measurement Techniques for Pediatric Lung Disease*
- 2004 European Respiratory Society School Course on Assessment and Interpretation of Infant Lung Function
Nice, France
Lectures: *The Infant Pulmonary Lab, Collins Medical
Clinical Usefulness in Individual Infants?
Full Forced Expiratory Maneuvers*
- 2003 Sunrise Seminar, American Thoracic Society Annual Conference
Lecture: *Implementation of Infant Pulmonary Function Testing As An Integral Part of the Pediatric Pulmonary Practice*
- 2002 Respiratory Care Journal Conference
Keystone, Colorado
Lecture: *Diagnostics*
- 2000-02 Infant PFT Round table at the NACF Conference
Moderator
- 1998 Pediatric Clinical Fellows Session at the CF Conference:
Moderator.
- 1996 Pediatric Clinical Fellows Session at the Cystic Fibrosis Conference
Lecture: *Follow-up of a Patient with Cystic Fibrosis who required Mechanical Ventilation as an Infant*

Grand Rounds:

- 2007 Grand Rounds, Wilmington AHEC
Obstructive Sleep Apnea
- 2005 Grand Rounds, UNC
Morbidity and Mortality; Enteropathica Dermatitis and Cystic Fibrosis
- 2004 Grand Rounds, Moses Cone Hospital
Pulmonary Function Testing in Infants and Young Children

2004 Grand Rounds, UNC
Infant Pulmonary Function Testing

2002 Grand Rounds, Wake Medical Center
Obstructive Sleep Apnea

2002 Grand Rounds, Moses Cone Hospital
Obstructive Sleep Apnea

2001 Grand Rounds, Rex Hospital
Infant Pulmonary Function Tests as a Clinical Research Tool

University:

2007, 2009 UNC Pediatric Pulmonology Physiology Series
Infant Lung Function Testing

2007 UNC Faculty Workshop
Faculty Development and Mentoring

2005 UNC Pediatric Noon Conference
Pediatric Lung Function Testing

2004 UNC Cystic Fibrosis Clinical Research Seminar
Detecting Early CF Lung Disease: HRCT of the Chest Multiple Breath Washout

2003-08 UNC Pediatric Pulmonary Fellows' Conference
Pediatric Spirometry

2001 UNC Cystic Fibrosis Clinical Research Seminar
High Resolution Computed Tomography with Controlled Ventilation

2001-04 UNC Pediatric Noon Conference
Obstructive Sleep Apnea

2001 UNC Pediatric Pulmonary Fellows' Conference
Infant Lung Function Testing

2000 UNC Neonatology Fellows' Conference
Infant Pulmonary Function Tests

2000 UNC Cystic Fibrosis Clinical Research Seminar
Infant Pulmonary Function Tests

1999 UNC Pediatric Pulmonary Fellows' Conference
Density Dependence of Forced Expiratory Flows in Infants

1998 Indiana University Pediatric Pulmonary Conference
Fetal Lung Development

1998 Indiana University Pediatric Pulmonary Conference
Hydrocarbon Poisoning and Aspiration

1997 Indiana University Pediatric Pulmonary Conference
Diagnosis and Management of Pleural Effusions

1997 Indiana University Pediatric Pulmonary Conference
Lung Volumes

1997 Respiratory Care Department's Continuing Education for the Healthcare Provider
Mechanical Ventilation and the Asthmatic Patient

Course Director:

2004-08 Pediatric Pulmonology rotation
Director of the residents, medical students

Research Mentor:

- 2007- Chandar Ramanathan; Pediatric Pulmonology Fellow
Project: *Evaluating Regulators of Mucus Clearance in Childhood Lung Disease*
Grant Support: Cystic Fibrosis Foundation Fellowship Grant (1st2nd 3rd year)
- 2007- Jessica Pittman; Pediatric Pulmonology Fellow
Projects: 1. *Spirometry in Biracial Children – Assessing the Adequacy of Current NHANES Race-Based Reference Equations*
2. *Early Onset and Progression of Primary Ciliary Dyskinesia Lung Disease Prior to 10 Years of Age*
- 2007- Ruchika Goel; Masters of Public Health Student (Practicum)
Project: *Physiologic, Inflammatory and Airway Remodeling Findings in Infants with Cystic Fibrosis*
- 2005-07 Elisabeth Dellon; Pediatric Pulmonology Fellow
Project: *Hypertonic Saline in Infants and Young Children with Cystic Fibrosis*
- 2004- Stacey Peterson-Carmichael; Pediatric Pulmonology/ICU Fellow
Projects: 1. *Effect of Inhaled Corticosteroids on Infant Pulmonary Function after RSV Bronchiolitis*
2. *Physiologic, Inflammatory and Airway Remodeling Findings in Infants with Cystic Fibrosis*
Grant Support: Medimmune Pediatric Fellowship Grant
- 2002-05 John Saito; Pediatric Pulmonology Fellow
Project: *Physiologic, Bronchoscopic and Bronchoalveolar Lavage Fluid Findings In Young Children with Recurrent Wheeze and Cough*

Residency Class Advisor

- 2004-07 Pediatric Resident class
2001-04 Pediatric Resident class

Scholarly Oversight Committee; PhD Thesis Reviews:

- 2008 Catherine Gangell, BsC; University of Western Australia
Thesis: *Evaluation of the Forced Oscillation Technique for Clinical Assessment of Young Children with Cystic Fibrosis*
- 2004-07 Kristy Herman; Neonatology Fellow

Attending on Clinical Service

I attend the clinical service 4 to 6 weeks annually. During these weeks, I give lectures to the residents and medical students. Lists of these lectures are below:

- Lung function Testing
- Cystic Fibrosis: Pathophysiology and Management
- Evaluation of the Noisy Breathing Infant
- Evaluation of the Infant with Recurrent Wheeze and Cough
- Chronic Cough

GRANTS:

Ongoing Research Support

5 U54 RR019480-02 (Knowles-PI) NIH (National Center for Research Resources) Genetic Disorders of Mucociliary Clearance A five center consortium evaluating rare diseases of the airways, which involve defects in mucociliary clearance.	8/1/2004 – 7/31/2009 \$892,327	1.20 calendar
1 P50 HL 084934-01 (Boucher-PI) NIH/NHLBI SCCOR in Host Factors in Chronic Lung Disease The purpose of this study is to assess host defense factors contributing to exacerbations of disease in COPD and CF.	9/15/2006– 7/31/2011 \$2,174,432	1.61 calendar
R01 HL069837 (Sleath -PI) NIH Children and Asthma: Communication and Outcomes The project is focused on a neglected area within children's health services research, the relationship between provider-child-caregiver communication during pediatric asthma visits and treatment adherence.	8/1/2005 – 7/31/2009 \$280,477	1.04 calendar
1U01HL092931-01 (Rosenfeld-PI; Davis-PI) NIH/NHLBI Subcontract with Childrens Hospital Regional Medical Center (Davis – PI) Infant Study of Inhaled Saline in Cystic Fibrosis (ISIS) This multiple center study evaluates 7% HS inhaled twice daily for 48 weeks versus twice daily inhalation of normal saline (placebo) in CF infants (4 to 15 months at enrollment).	10/1/08-7/31/12 \$83,692	2.4 cal months
ISIS07KO (Davis-PI; Rosenfeld-PI) Cystic Fibrosis Foundation Infant Study of Inhaled Saline in Cystic Fibrosis (ISIS) This multiple center study evaluates 7% HS inhaled twice daily for 48 weeks versus twice daily inhalation of normal saline (placebo) in 150 CF infants (4 to 15 months at enrollment).	10/01/2007 – 9/30/09 \$836,587	0 calendar
Genentech, Inc. (Davis-PI) Consulting Agreement for Protocol Z4240g Dr. Davis will act as consultant for oscillometry and spirometry testing in preschool children. This includes contributing to the development of study procedures, the processes for data collection, the review of study data ("over-reading"), the methods for analysis of and evaluation of the data, and review of study related documents (e.g., reports, manuscripts) as requested.	1/1/08-12/31/09 \$11,000	.24 Calendar
Genentech, Inc. (Davis-Site PI) Z4240g A Phase IV, Multicenter, Randomized, Double Blind, Placebo Controlled Trial of Pulmozyme in 3- TO 5-Year-Old Patients with CF	6/24/08-6/23/11 \$43,283	.84 Calendar

This is a Phase IV, multicenter, randomized, double-blind, placebo-controlled trial designed to evaluate the effect of study drug on pulmonary function, health related quality of life (HRQOL), and respiratory symptoms in 3 to 5 year old children with Cystic Fibrosis.

DAVIS08Y2 (Davis-PI) 1/1/09-12/31/09 .12 Calendar
 Cystic Fibrosis Foundation Therapeutics, Inc \$39,122
 Infant and Preschool Pulmonary Function Testing Core
 The goal of this project is to ensure that TDN sites are performing infant and preschool lung function testing as outlined in the protocols and Standard Operating Procedures and that the data collected is of research quality.

Completed Research Support

Cystic Fibrosis Clinical Research Grant 7/1/05-6/31/08 9.3%
 Cystic Fibrosis Foundation \$18,597 (1st year); \$92,077 (3 years)
 Spirometry as an Outcome Measure in Preschool Children with CF Kerby04A0
 An 8 center study evaluating lung function measurements longitudinally in preschoolers with cystic fibrosis and age-matched controls
Role Co-PI

Cystic Fibrosis Foundation 7/07-6/08 7%
 A Pilot Study to Evaluate the Tolerability of Inhaled
 Hypertonic Saline in Infants with Cystic Fibrosis \$20,000
Role: Co-PI

Cystic Fibrosis Foundation 2/1/05-1/31/07 15%
 Cystic Fibrosis Clinical Research Grant \$47,365 (1st year); \$69,234 (2 years)
 Hypertonic Saline in Infant and Young Children with CF
 A single center study assessing the safety of hypertonic saline in infants and young children with cystic fibrosis
Role PI

DAVIS08Y2 2/1/03-1/31/07 30%
 Cystic Fibrosis Foundation \$75,190 (last year) \$1,000,000 (over 3 years)
 Evaluation of Pulmonary Function Tests from Raised Lung Volumes as Outcome Measures for Clinical Trials in Infants with Cystic Fibrosis
 A 10 center study evaluating longitudinal changes of infant lung function testing over 1 year in infants with cystic fibrosis
Role PI

Cystic Fibrosis Clinical Research Grant 7/1/02-6/30/05
 Cystic Fibrosis Foundation \$80,000
 Detecting Early, Reversible CF Lung Disease on HRCT
 This study is correlating changes on HRCT of the chest to bronchoscopy findings.
Role PI

Harry Shwachman Clinical Investigator Award 7/1/00-6/30/03
 Cystic Fibrosis Foundation \$225,000
 Physiologic and BALF Markers of Early CF Lung Disease
 This study is investigated early markers of cystic fibrosis lung disease noted on infant lung function testing and bronchoscopy.
 Role: PI

Thomas H. Davis Fellowship Award 7/1/00-6/30/02
 American Lung Association \$60,000
 Physiologic Versus Bronchoscopic Markers in Wheezy Infants
 This study correlated physiologic markers on infant lung function testing to bronchoscopy findings.
 Role: PI

Cystic Fibrosis Foundation Clinical Fellowship Grant 7/1998-6/1999
Density Dependence of Maximal Flows in CF Infants \$55,000
 Principal Investigator: Davis Sponsor: Robert S. Tepper, MD, PhD

Cystic Fibrosis Foundation Clinical Fellowship Grant 7/1997-6/1998
 Principal Investigator: Davis Sponsor: Howard Eigen, MD \$31,400

Cystic Fibrosis Foundation Clinical Fellowship Grant 7/1996-6/1997
 Principal Investigator: Davis Sponsor: Howard Eigen, MD

PROFESSIONAL SERVICE:

Committees:

International/National:

- 2009- Pediatric Planning Committee
 American Thoracic Society
- 2007- Pediatric Chair Elect
 Pediatric Planning Committee
 American Thoracic Society
- 2005- Member
 Pediatric Program Committee
 American Thoracic Society
- 2003-05 Infant/ Preschool PFT Standardization Taskforce
 American Thoracic Society
 USA Co-Chair
- 2005- National Resource Center Committee
 Therapeutic Development Network, Cystic Fibrosis Foundation
 Chair
- 2003-04 Pediatric Assembly Nominating Committee

American Thoracic Society
Member
2000- Outcomes for Young Children with CF Working Committee
Therapeutic Development Network, Cystic Fibrosis Foundation
Co-Director

UNC:

2007- Faculty Development Committee, Department of Pediatrics
Chair
2007- Promotions Committee
Department of Pediatrics
Member
2005, 2007 Department of Pediatrics Evening of Scholarship
Judge of Clinical Abstracts
2003-05 Pediatric Clerkship Advisory Committee
Department of Pediatrics
Member
2002-08 Pediatric Intern Selection Committee
Department of Pediatrics
Member
2001-02 Promotions Committee
Department of Pediatrics
Member

Professional Membership:

American Academy of Pediatrics
American Thoracic Society
North Carolina Medical Society
Society of Pediatric Research

UNC Administrative Activities

2007- Pediatric Pulmonology Fellowship Director
2001-07 Resident Advisor
Department of Pediatrics
2001- Associate Director of PFT Laboratory
2001- Medical Director of Infant PFT Laboratory

Reviewer:

American Journal of Respiratory and Critical Care Medicine
Austrian Science Fund

Chest
European Journal of Applied Physiology
European Respiratory Journal
Health Research Board of Ireland
Health Services, Public Health Research Board Medical Research Council(England)
Journal of Applied Physiology
Lancet
New England Journal of Medicine
The Journal of Pediatrics
Pediatric Pulmonology
Pediatric Research
Respiratory Physiology and Neurobiology
Thorax