

## Curriculum Vitae

### Lindo Terry Spencer, Jr.

#### I. Personal Data

Office Address: Children's Hospital Boston  
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#### II. Education

8/84-5/87	B.S.	University of North Carolina at Chapel Hill	Biology
8/89-5/94	M.D.	University of North Carolina at Chapel Hill	

#### III. Postgraduate Education

7/94-6/95	Internship	University of Florida College of Medicine	Pediatrics
7/95-6/97	Residency	University of Florida College of Medicine	Pediatrics
7/97-6/99	Fellowship	University of Florida College of Medicine	Pediatric Pulmonology

#### IV. Additional training, education, certification

2000-2001	Advanced Postgraduate Program in Clinical Investigation, University of Florida College of Medicine
2007	Certified Physician Investigator, Association of Clinical Research Professionals/ Academy of Pharmaceutical Physicians and Investigators

#### IV. Academic Appointments

7/99-12/99	Clinical Post-Doctoral Associate, University of Florida College of Medicine
1/00-6/06	Assistant Professor of Pediatrics, University of Florida College of Medicine
7/01-6/03	Assistant Director, Bronchoalveolar Lavage Research Laboratory, University of Florida College of Medicine
7/03-Present	Medical Director, Asthma Research Laboratory, University of Florida College of Medicine
2003-2005	Director, Bronchoalveolar Lavage Research Laboratory, University of Florida College of Medicine
7/04-6/06	Director, Pediatric Pulmonary Function Lab, University of Florida College of Medicine
7/05 – 6/07	Clinical Assistant Professor of Pediatrics, University of Florida College of Medicine
8/2005 -	Director, Pediatric Clinical Trials Unit, University of Florida College of Medicine
3/2005 -	Director, Cystic Fibrosis Care Center, University of Florida College of Medicine
8/2005 -	Division Chief, Pediatric Pulmonary Diseases, University of Florida College of Medicine

- 7/2007 - Clinical Associate Professor of Pediatrics, University of Florida College of Medicine
- 11/2007 - Assistant Professor of Pediatrics, Harvard Medical School, Boston, MA  
Director, Cystic Fibrosis Center, Children's Hospital Boston  
Director of Clinical Research, Division of Respiratory Diseases, Department of Medicine, Children's Hospital Boston

#### V. Undergraduate & Graduate Research Employment

- 1987-89 Research Assistant. The Salk Institute for Biological Studies, Department of Cancer Biology. PI: I.S. Trowbridge, Ph.D. Mechanisms of receptor-mediated human transferrin endocytosis.
- 1993-94 NIH Medical Student Research Program, University of California, San Diego, School of Medicine, Department of Pediatrics, Division of Infectious Diseases. PI: S.A. Spector, M.D. HIV-1 phenotypes and clinical status of perinatally-infected children.

#### VI. Honors and Awards

- 1983-87 John Motley Morehead Scholarship, University of North Carolina
- 1984-86 Atlantic Coast Conference All-Academic Team
- 1992 University of North Carolina School of Medicine Student Research Award
- 1992 American Academy of Allergy and Immunology Summer Fellowship Award
- 1993 National Institute of Health Medical Student Research Award
- 1993 Society for Pediatric Research Student Research Program
- 1994 John B. Graham Student Research Society
- 1999 University of Florida, Department of Pediatrics Most Outstanding Fellow
- 1999 Henry A. Kokomoor Research Award in Pediatrics
- 2000 American College of Chest Physicians Clinical Research Award Finalist
- 2003 National Institutes of Health, Loan Repayment Program, Pediatric Research
- 2004 Elected to the Society for Pediatric Research

#### VII. Grants Awarded

##### Active Grants

- 2/03- Children's Miracle Network. *Evaluation of Anti-Inflammatory Effects of Azithromycin in Patients with Cystic Fibrosis*. \$19,840 total direct costs. (Role: PI).
- 3/04- Novartis. *The Effect of Omalizumab on Airway Responsiveness to Adenosine in Children with Poorly Controlled Asthma*. \$28,939 total direct costs. (Role: Sub-Investigator PI: L. Hendeles, PharmD).
- 9/04- Cystic Fibrosis Foundation Therapeutics Development Network. *Effectiveness and Safety of Intermittent Antimicrobial Therapy for the Treatment of New Onset Pseudomonas aeruginosa Airway Infection in Young Patients with Cystic Fibrosis*. (Role: Site PI). \$25,612 total direct costs.
- 2/05- National Institutes of Health R01DK58356-01A1./ University of Minnesota. *Insulin Therapy to Improve Body Mass Index and Pulmonary Function in Cystic Fibrosis*. \$20,370 total direct costs. (Role: Site PI; PI: Antoinette Moran, M.D.).
- 3/05- Corus Pharma. *A Phase 3, Double-Blind, Multicenter, Randomized, Placebo-Controlled Trial with Aztreonam Lysinate for Inhalation in Cystic Fibrosis with Pulmonary P. aeruginosa Requiring Frequent Antibiotics*. \$86,033 total direct costs, based on subject enrollment. (Role: Site PI).

- 5/05- Genentech, Inc. *Epidemiologic Study of Cystic Fibrosis*. \$4152 total direct costs (Role: Site PI).
- 6/05- Corus Pharma. *A Phase 3, Double-Blind, Multi-center, Multinational, Randomized, Placebo-Controlled Trial Evaluating Aztreonam Lysinate for Inhalation in Cystic Fibrosis Patients with Pulmonary P. aeruginosa*. \$35,072 total direct costs, based on subject enrollment. (Role: Site PI).
- 6/05- Corus Pharma. *A Phase 3, Open-Label, Follow-on Study of Multiple Courses of Aztreonam Lysinate for Inhalation in Cystic Fibrosis Patients*. \$71,019 total direct costs, based on subject enrollment. (Role: Site PI).
- 3/06- Eurand, Inc. *A Randomized, Double-Blind, Placebo-Controlled Two-Treatment, Crossover Study to Evaluate the Safety and Efficacy of Eurand Pancreatic Enzyme Product in Patients With Cystic Fibrosis and Exocrine Pancreatic Insufficiency*. \$40,690 total direct costs, based on subject enrollment. (Role: Site PI).
- 4/06- Eurand, Inc. *An Open-Label Study to Evaluate Safety and Efficacy of Euand Pancreatic Enzyme Product Microtabs in Pediatric Patients with CF and Exocrine Pancreatic Insufficiency*. \$15,534 total direct costs, based on subject enrollment.
- 6/06- National Institutes of Health R01HL68927-01./ Johns Hopkins University. *Genetic Modifiers of Cystic Fibrosis*. \$2025 total direct costs, based on subject enrollment. (Role: Site PI; PI: Garry Cutting, M.D.).
- 2/07- Cystic Fibrosis Foundation. Clinical Research Facilitation Award. \$120,000 total direct costs. (Role: Site PI).

#### Pending Grants

Inspire Pharmaceuticals, Inc. *A Multi-Center, Double-Blind, Placebo-Controlled Randomized, Efficacy and Safety Study of Denufosol Tetrasodium Inhalation Solution in Patients with Mild Cystic Fibrosis Lung Disease*. Budget not finalized.

#### Past support

- 12/97-6/98 Children's Miracle Network. *Radiographic and Bronchoscopic Characterization of Pulmonary Disease in HIV-Infected Children*. \$8000 total direct costs. (Role: PI)
- 7/99-12/01 Children's Miracle Network. Junior faculty research start-up funds. \$20,000 total direct costs.
- 9/99- 7/01 PPL Therapeutics Ltd. *A Pilot Study to Assess Biochemical Markers in Epithelial Lining Fluid Following Treatment with Nebulized Transgenic Human Alpha-1 Antitrypsin Administered Daily for Eight Weeks to Alpha-1 Antitrypsin Deficient Patients*. \$331,888 total direct costs. (Role: Co-Investigator; PI: M. Brantly).
- 12/99-12/01 Howard Hughes Medical Institute Biomedical Research Support Program. New Faculty Research Set-Up Funds. \$50,000 total direct costs.
- 2/01-1/0 Aventis Behring. *A Double-Blind, Randomized, Placebo-Controlled, Dose Escalation Study to Assess the Safety and Tolerance of Aerosolized Alpha1-Proteinase Inhibitor in Subjects With Alpha1-Antitrypsin Deficiency*. \$419,781 total direct costs. (Role: Co-PI; PI: M. Brantly)
- 6/01-6/03 Cystic Fibrosis Foundation. *Characterization of Lower Respiratory Tract Inhibition Factors of Recombinant Adeno-Associated Virus Transduction in Cystic Fibrosis Patients*. \$100,000 total direct costs. (Role: PI).

- 7/01- 7/02 Merck Respiratory Young Investigators Program. *Development and Validation of Noninvasive Measurements of Pulmonary Inflammation*. \$5000 total direct costs. (Role: PI).
- 9/01- 9/03 Children's Miracle Network. *Airway Inflammation in Pediatric Lung Transplant Recipients*. \$20,000 total direct costs. (Role: Co-Investigator; PI: A. Faro).
- 12/01-6/03 Alpha One Foundation. *Characterization of Alveolar Macrophage Dysfunction in Patients with  $\alpha$ 1-Antitrypsin Deficiency*. \$25,000 total direct costs. (Role: PI).
- 5/01-12/02 Targeted Genetics Corporation. *A Multicenter Double-Blind, Placebo-Controlled Phase II Study of Aerosolized tgAAVCF in Cystic Fibrosis Patients with Mild Lung Disease*. \$98,173 total direct costs. (Role: Site PI).
- 5/01-6/02 Cystic Fibrosis Foundation Therapeutics Development Network. *Evaluation of Exposure and Health Care Worker Response to Nebulized Administration of tgAAVCF to Patients with Cystic Fibrosis*. \$2500 total direct costs. (Role: Site PI).
- 1/03- 10/03 Baxter Healthcare Corporation. *Phase I Safety Investigation of an Aerosolized, Recombinant Alpha 1-Antitrypsin in Subjects with Alpha 1-Antitrypsin Deficiency*. \$293,811 total direct costs. (Role: Co-Investigator; PI: M. Brantly).
- 11/03- 9/04 Corus Pharma. *A Blinded, Multicenter, Randomized, Placebo-Controlled Trial with Aztreonam for Inhalation (AI) in Cystic Fibrosis Patients with Lung Disease Due to P. aeruginosa Infection*. \$28,877 total direct costs. (Role: Site PI).
- 9/03-12/05 Cystic Fibrosis Foundation Therapeutics Development Network. *A Multicenter Double-Blind, Placebo-Controlled Phase II Study of Aerosolized tgAAVCF for the Treatment of Cystic Fibrosis*. \$66,639 total direct costs. (Role: Site PI)
- 1/00-12/05 National Institutes of Health (NHLBI) 1 K23 HL04213-01. *The Role of  $\alpha$ -Defensins in Cystic Fibrosis Lung Disease*. \$672,550 total direct costs. (Role: PI).
- 3/05-2/06 Corus Pharma. *Evaluation of CF Patient Perception of Symptom Improvement Following Inhaled Antibiotic Treatment*. \$13,675 total direct costs. (Role: Site PI).
- 3/04-3/06 Baxter Healthcare Corporation. *A Phase 1B/2A Study to Evaluate the Effect of Aerosolized, Recombinant Alpha-1-Antitrypsin on Epithelial Fluid Analytes in Subjects with Alpha-1-Antitrypsin Deficiency*. \$222,650 total direct costs. (Role: Co-Investigator; PI: M. Brantly).
- 5/04-4/06 Altus Biologics. *A Phase 2, Randomized, Double Blind, Parallel Dose Ranging Study of Oral Theraclec-Total in Cystic Fibrosis Patients with Exocrine Pancreatic Insufficiency*. \$93,296 total direct costs. (Role: Site PI).
- 7/05-6/06 Cystic Fibrosis Foundation. Cystic Fibrosis Center Grant. \$89,155 total direct costs. (Role: Center Director).

#### **VIII. Board Certification**

American Board of Pediatrics # 063105  
Pediatric Pulmonology # 000753

**IX. Licensure**

Florida  
Georgia, Inactive

**X. Professional Affiliations**

American Academy of Pediatrics  
American College of Chest Physicians  
American Thoracic Society  
Association of Clinical Research Professionals  
Academy of Pharmaceutical Physicians and Investigators

**XI. Academic Service**

1999- 2002	University of Florida College of Medicine, Department of Pediatrics Research Strategy Review Team
2001	Poster Session Facilitator. Pediatric Clinical Problems. American Thoracic Society International Conference
2001-Present	American Lung Association of Florida Professional Educational and Research Committee
2002-2005	Alpha-1 Foundation Clinical Resource Center Working Group
2002-2005	Faculty, General Clinical Research Center Science of Clinical Research Course. University of Florida College of Medicine
2003-Present	University of Florida College of Medicine, Department of Pediatrics Translational Research Strategic Committee
2003	Session Moderator and Judge, Postdoctoral Studies, University of Florida College of Pharmacy Research Showcase
2003-2005	Alpha-1 Foundation Speaker Bureau
2004-Present	Pediatric Residency Interview Group
2005-Present	University of Florida Department of Pediatrics Internal Data Safety and Monitoring Board
2005-Present	Director, Pediatric Pulmonology Elective, University of Florida College of Medicine

**XII. Journal Review**

Ad Hoc Reviewer

Chest  
Blood  
American Journal of Respiratory Cell and Molecular Biology  
Thorax  
Acta Paediatrica  
Pediatrics  
Respiratory Medicine  
Biotechnology Progress  
Journal of Pediatric Gastroenterology and Nutrition

**XIII. Service to the Pharmaceutical Industry**

1998-Present	Respiratory Regional Consultant, Merck & Co.
2000-2001	Florida Pediatric Asthma Regional Advisory Board, GlaxoSmithKline
2000-2002	Bayer Alpha1-Antitrypsin Advisory Committee
2001-Present	Aventis Behring Alpha1-Antiprotease Strategic Advisory Committee

2003

Pfizer Asthma and COPD Advisory Board

**XIV. Bibliography**Peer Reviewed Journals

Jing S, **Spencer T**, Miller K, Hopkins CR, Trowbridge IS. Role of the human transferrin receptor in endocytosis: localization of a specific signal sequence for internalization. *Journal of Cell Biology* 1990; 110(2):283-294.

**Spencer LT**, Ogino MT, Dankner WM, Spector SA. Clinical significance of human immunodeficiency virus type 1 phenotypes in infected children. *Journal of Infectious Diseases*. 1994; 169:491-495.

**Spencer LT**, Langham MR, Hoyer MH, Jones DA, Caridi JG, Chesrown SE. Resolution of hypoxemia in a liver transplant patient following ligation of a portosystemic shunt. *Journal of Pediatrics* 2000; 137(4):575-577.

**Spencer LT**, Paone G, Krein P, Rouhani F, Rivera-Nieves J, Brantly M. The role of human neutrophil peptides in lung inflammation associated with  $\alpha$ 1-antitrypsin deficiency. *American Journal of Physiology- Lung Cellular and Molecular Physiology* 2004; 286(3):L514-520.

Moss RB, Rodman D, **Spencer LT**, Aitken ML, Zeitlin PL, Waltz D, Milla C, Brody A, Clancy JP, Ramsey B, Hamblett N, Heald AE. Repeated adeno-associated virus serotype 2 aerosol-mediated cystic fibrosis transmembrane regulator gene transfer to the lungs of patients with cystic fibrosis: a multicenter, double-blind, placebo-controlled trial. *Chest* 2004;125:509-521.

Flotte TR, Brantly ML, **Spencer LT**, Byrne BJ, Spencer CT, Baker DJ, Humphries M. Phase I trial of intramuscular injection of a recombinant adeno-associated virus alpha 1-antitrypsin (rAAV2-CB-hAAT) gene vector to AAT-deficient adults. *Human Gene Therapy* 2004; 15(1):93-128.

**Spencer LT**, Humphries JE, Brantly ML. Systemic Antibody Response to an Aerosolized Transgenic Human Alpha-1 Antitrypsin Formulation. Peer reviewed correspondence. *New England Journal of Medicine*. 2005. 12;352(19):2030-1.

Brantly ML, **Spencer LT**, Humphries M, Conlon TJ, Spencer CT, Poirier A, Garlington W, Baker D, Song S, Berns KI, Muzyczka N, Snyder RO, Byrne BJ, Flotte TR. Phase I Trial of Intramuscular Injection of a Recombinant Adeno-associated Virus Serotype 2 alpha(1)-Antitrypsin (AAT) Vector in AAT-Deficient Adults. *Human Gene Therapy* 2006. 17(12):1177-86.

Khan Y, Tang Y, Hochhaus G, Shuster JJ, **Spencer T**, Chesrown S, Hendeles L. Lung bioavailability of HFA fluticasone in young children when delivered by anti-static chamber/mask. *Journal of Pediatrics* 2006;149(6):793-7.

Zhang B, Lu Y, Campbell-Thompson M, **Spencer T**, Wasserfall C, Atkinson M, Song S. Alpha1-Antitrypsin Protects Beta-Cells From Apoptosis. *Diabetes*. 2007;56(5):1316-1323 .

Hendeles L, Khan Y, Shuster JJ, **Spencer T**. Comparison of two dosimeters by methacholine challenge. *Journal of Allergy and Clinical Immunology* 2007:(in press).

Moss RB, Milla C, Colombo J, Accurso F, Zeitlin PL, Clancy JP, Rodman D, **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 (accepted for publication)

Invited Non Peer Reviewed Publications

**Spencer LT**. The Pediatric Perspective of Lung Disease Associated with Alpha-1 Antitrypsin Deficiency. Alpha-1 Foundation Research Registry Update. Fall 2001.

**XV. Abstracts**

**Spencer LT**, Dankner WM, Spector SA. HIV-1 phenotypes in perinatally infected children. *J Cell Biochem Suppl* 1993. 17E: 57.

**Spencer LT**, Dankner WM, Spector SA. Clinical significance of HIV-1 phenotypes in infected children. *Pediatric Research* 1993. 33(4) 184A.

**Spencer LT**, Flotte TR, Brantly ML. Elevated levels of human neutrophil peptides in the epithelial lining fluid of patients with cystic fibrosis. *Pediatric Pulmonology* 1999. Supplement 19:321.

**Spencer LT**, Langham MR, Hoyer MH, Jones DA, Caridi JG, Chesrown SE. Resolution of hypoxemia in a liver transplant patient following ligation of a portosystemic shunt. *Chest*. 116 (4 Suppl. 2): 431-2S.

**L.T. Spencer**, C.C. Tobias, E. Friskel, M. Newman, G.C. Moen, M.L. Brantly. Augmentation of lower respiratory tract anti-protease protection in  $\alpha$ 1-antitrypsin deficient individuals using nebulized transgenic human  $\alpha$ 1-antitrypsin. *Am Jnl Resp Crit Care Med*. 161 (3) 2000.

**L.T. Spencer**, C.C. Tobias, M.W. Konstan, J.B. Hilliard, T.R. Flotte, M.L. Brantly. Elevated levels of neutrophil defensins in the lower airways of patients with cystic fibrosis correlate with markers of pulmonary inflammation. *Am Jnl Resp Crit Care Med*. 161 (3) 2000.

**L.T. Spencer**, C.C. Tobias, E. Friskel, M. Newman, G.C. Moen, M.L. Brantly. Interlobar variation in pro-inflammatory factors in  $\alpha$ 1-antitrypsin deficient individuals. *Am Jnl Resp Crit Care Med*. 2000 16 (3).

**L.T. Spencer**, C.C. Tobias, D.P. Pollock, K.F. Keisling, G.C. Moen, M.L. Brantly. Transgenic human  $\alpha$ 1-antitrypsin administered by nebulization augments anti-protease protection and provides anti-inflammatory effects in the lower respiratory tract of patients with  $\alpha$ 1-antitrypsin deficiency. *Chest* 2000. 118(4):122S.

**L.T. Spencer**, G Paone, M.W. Konstan, J.B. Hilliard, T.R. Flotte, M.L. Brantly. Cytotoxic and inflammatory effects of human neutrophil peptides in the lower airways of patients with cystic fibrosis. *Pediatric Pulmonology* 2000. 30(S20): 288.

**L.T Spencer**, ML Brantly. Alveolar macrophage dysfunction in patients with  $\alpha$ 1-antitrypsin deficiency. *Jnl Investigative Medicine*. 2000. 49 (2): 191A.

**L.T. Spencer**, D.P. Pollock, A.D. Whittaker, V.J. Corcoran, J. M. Stocks, M.L. Brantly. Dose-dependent restoration of protease:anti-protease homeostasis in  $\alpha$ 1-antitrypsin deficient patients using Aerosolized dry powder human  $\alpha$ 1-antitrypsin. *Am Jnl Resp Crit Care Med.* 2002 165(8): A95.

A. Faro, **L.T. Spencer**, G.A. Visner, M. Brantly. Neutrophil defensin concentrations in pediatric lung transplant recipients. *J Heart Lung Transplant* 2003. 22(1S):S132.

**L.T. Spencer**, D.P. Pollock, A.W. Whittaker, M.L. Brantly. Differential susceptibility of bronchial epithelial cells expressing a cystic fibrosis phenotype to human neutrophil peptide-induced cytotoxicity. *Am Jnl Resp Crit Care Med.* 2003. 167(8): E24.

M.J. Asmus, G. Hochhaus, Y. Yang, **L.T. Spencer**, S.E. Chesrown, L. Hendeles. Impact of new anti-static valved-holding chamber on airway delivery of inhaled fluticasone propionate in asthmatic children. *Am Jnl Resp Crit Care Med.* 2004 169: A150.

**L.T. Spencer**, C.R. Abernathy, D.P. Pollock, Q.W. Rance, M.L. Brantly. Validation of Bronchoalveolar Lavage Assays Relevant to the Study of Aerosolized Alpha1-Antitrypsin. *Am Jnl Resp Crit Care Med.* 2004 169: A844.

**L.T. Spencer**, D.P. Pollock, JM Stocks, M.L. Brantly. Lower respiratory tract biochemical efficacy of intravenous administration of a new form of highly purified alpha1-antitrypsin. *Chest* 2005 128 (4): 261S-261S.

## **XVI. Invited Presentations**

- 1993 *Clinical significance of HIV -1 phenotypes in infected children.* Featured Research Platform Session. AIDS & Its Associated Diseases. Society for Pediatric Research Annual Meeting. Washington, D.C.
- 1998 *Hypoxia and dyspnea in a child with chronic liver disease.* Pediatric Clinical Chest Rounds. American Thoracic Society International Conference. Chicago, IL.
- 1998 *Large gastrointestinal blood loss in a patient with cystic fibrosis.* Pediatric Clinical Fellows Session. North American Cystic Fibrosis Conference. Montreal, Canada.
- 1999 *What's new in the world of cystic fibrosis?* Updates in Pediatric Pulmonary Care: An Interdisciplinary Program. Gainesville, FL.
- 1999 *Cystic Fibrosis Update.* Tallahassee Pediatric Association. Continuing Medical Education. Tallahassee, FL
- 2000 *Cystic Fibrosis Research Update.* Joe DiMaggio Children's Hospital Cystic Fibrosis Clinic. West Palm Beach, FL.
- 2000 *New Topics in Pediatric Asthma.* Gainesville Pediatrics Association. Continuing Medical Education. Gainesville, FL.
- 2000 *Potential role of neutrophils in severe asthma.* Merck Respiratory Young Investigators Meeting. New York, NY.
- 2000 *Pediatric Asthma: A Case-Oriented Discussion.* Gainesville Pediatrics Association. Gainesville, FL.
- 2001 *Standardization of Methods and Impediments: Anatomical Variation and Longitudinal Variation in Exacerbations of Lung Disease Associated with Alpha1 Antitrypsin Deficiency.* NIH/Alpha One Foundation Critical Issues Workshop on Inflammatory Markers. Bethesda, MD.

- 2001 *Update on the Pharmacotherapy of Asthma*. University of Florida- Jacksonville Pediatric Asthma and Respiratory Course. Jacksonville, FL.
- 2001 *Inflammatory Lung Disease Associated with Cystic Fibrosis and Alpha1-Antitrypsin Deficiency*. University of Florida Advanced Postgraduate Program in Clinical Investigation Annual Retreat. Steinhatchee, FL.
- 2002 *Pediatric Asthma: New Issues in Management*. South Coastal Georgia Pediatrics Association. Brunswick, GA.
- 2002 *Update on Airway Clearance Techniques*. Respiratory Care Symposium. Gainesville, FL.
- 2002 *Neonatal Screening for Alpha-1 Antitrypsin Deficiency*. 4<sup>th</sup> International Scientific Conference on Epidemiological Aspects of Alpha-1 Antitrypsin Deficiency. Charleston, SC.
- 2002 *Mild and Moderate Persistent Asthma in Children*. Gainesville Pediatricians and Family Practitioners. Gainesville, FL
- 2003 *Eradication of Pseudomonas aeruginosa from the Lower Respiratory Tract: A Pro/Con Discussion*. Cystic Fibrosis Patient Education Day. Gainesville, FL.
- 2003 *Alpha-1 Antitrypsin Deficiency*. Updates in Pediatric Pulmonary Care V. Gainesville, FL.
- 2003 *Pediatric Flexible Bronchoscopy*. Updates in Pediatric Pulmonary Care V. Gainesville, FL.
- 2003 *Gene Therapy for Alpha1-Antitrypsin Deficiency*. AIR 2003 International Meeting on Alpha1-Antitrypsin Deficiency. Barcelona, Spain.
- 2003 *Office-Based Spirometry*. Gainesville Primary Care Physicians Association Meeting. Gainesville, FL.
- 2004 *Treatment Approaches to Pediatric Asthma*. Quincy, FL.
- 2004 *End of Life Issues in Cystic Fibrosis & Chest Wall Diseases*. Pegasus Children's Hospice Program. Gainesville, FL.
- 2004 *Unique Challenges in Managing Pediatric Asthma*. South Florida Pediatric Association. Miami, FL.
- 2005 *Cystic Fibrosis: Not the usual top 10 complications*. Updates in Pediatric Pulmonary Care VII. Gainesville, FL.
- 2006 *The History of Cystic Fibrosis*. Updates in Pediatric Pulmonary Care VIII. Gainesville, FL.
- 2007 *Newborn Screening for Cystic Fibrosis*. Grand Rounds, Department of Pediatrics. University of Florida College of Medicine.