

## BIOGRAPHICAL SKETCH

Give the following information for the key personnel and consultants and collaborators. Begin with the principal investigator/program director. Photocopy this page for each person.

NAME Richard B. Moss	POSITION TITLE Professor of Pediatrics
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**EDUCATION** (*Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.*)

INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Columbia College, New York, NY	BA	1971	Liberal Arts
SUNY Downstate Medical Center, New York, NY	MD	1975	Medicine
Northwestern University, Chicago, IL	Residency	1975-77	Pediatrics
Stanford University, Stanford, CA	Fellowships	1977-81	Allergy-Immunology, Pulmonology

**RESEARCH AND/OR PROFESSIONAL EXPERIENCE:** Concluding with present position, list in chronological order previous employment, experience, and honors. Include present membership on any Federal Government public advisory committee. List, in chronological order, the titles, all authors, and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. If the list of publications in the last three years exceeds two pages, select the most pertinent publications. **DO NOT EXCEED TWO PAGES.**

### **PROFESSIONAL EMPLOYMENT:**

1981-1988      Assistant Professor of Pediatrics, Stanford University School of Medicine  
 1988-1994      Associate Professor of Pediatrics, Stanford University School of Medicine  
 1994-present    Professor of Pediatrics, Stanford University School of Medicine

### **EXPERIENCE & HONORS:**

Alpha Omega Alpha Honor Medical Society	1974
American Lung Association Training Fellowship	1980-2
California Thoracic Society Medical Research Award	1980-1
Certifications: Pediatrics; Allergy-Immunology	1981
Diagnostic Laboratory Immunology	1986
Director, Allergy Reference Laboratory & Ross Mosier Laboratory for Cystic Fibrosis Research, Packard Children's Hospital at Stanford	1985-2005
Director, Stanford Allergy-Immunology Fellowship Training Program	1989-1995, 2005-present
Director, Stanford Cystic Fibrosis Center	1991-present
Chief, Division of Allergy-Immunology & Pulmonary Medicine, Department of Pediatrics, Stanford University Medical School	1991-1995, 2004-2005
NIH/NHBLI Asthma and Tuberculosis Academic Awards, Special Emphasis Panels	1994-1995
Chief, Division of Pediatric Pulmonology, Department of Pediatrics, Stanford University Medical School	1995-2004
Consultant, Committee to Study Priorities for Vaccine Development, Institute of Medicine/National Academy of Sciences	1996
NIH/DRG Biological and Physiological Sciences Special Emphasis Panel	1996
NIH/NCRR GCRC Site Review Panel	2002
Plenary Lecture, North American Cystic Fibrosis Conference	1989, 2003
Chair, Therapeutics Development Network Protocol Review Committee	2003-2005
Professional of the Year, Cystic Fibrosis Research, Inc.	2003
American Pediatric Society	2005

### **SELECTED PUBLICATIONS from 2000-present:**

- Moss RB**, Hsu YP, Olds L. Cytokine dysregulation in activated cystic fibrosis peripheral lymphocytes. *Clin Exp Immunol* 120: 518-525, 2000.
- Yee K, Robinson C, Hurlock G, **Moss RB**, Wine JJ. Novel cystic fibrosis mutation L1093P: functional analysis and possible Native American origin. *Hum Mutation* 15:208, 2000.
- Howling SJ, Northway WH Jr, **Moss RB**, et al. Pulmonary sequelae of bronchopulmonary dysplasia survivors: high-resolution CT findings. *AJR Am J Roentgenol* 174:1323-1326, 2000.
- Moss RB**. New approaches to cystic fibrosis. *Hospital Practice* 36: 25-37, 2001. Online at <http://www.hospract.com/issues/2001/01/moss.htm>
- Wine JJ, Kuo E, Hurlock G, **Moss RB**. Comprehensive mutation screening in a cystic fibrosis center. *Pediatrics* 107: 280-286, 2001.
- Robinson TE, Leung AN, Northway WH, et al, **Moss RB**. Spirometer-triggered high resolution CT and pulmonary function measurements during an acute exacerbation in patients with cystic fibrosis. *J Pediatrics* 138:553-559, 2001.
- Moss RB**. Administration of aerosolized antibiotics in cystic fibrosis patients. *Chest* 120:107S-113S, 2001.
- Aitken ML, **Moss RB**, Waltz DA, et al. A Phase I study of aerosolized administration of tgAAVCF to CF subjects with mild lung disease. *Human Gene Therapy* 12:1907-1916, 2001.
- Moss RB**. Long-term benefits of inhaled tobramycin in adolescent patients with cystic fibrosis. *Chest* 121: 55-63, 2002.
- Wagner JA, Nepomuceno IB, **Moss RB**, et al. A phase II, double-blind, randomized, placebo-controlled clinical trial of tgAAVCF using maxillary sinus delivery in patients with cystic fibrosis with antrostomies. *Hum Gene Therapy* 13:1349-1359, 2002.
- Moss RB**. Allergic bronchopulmonary aspergillosis. *Clinical Reviews in Allergy* 23:87-104, 2002.
- Gibson RL, Emerson J, **Moss R**, et al. Significant microbiology effect of inhaled tobramycin in young children with cystic fibrosis. *Am J Respir Crit Care Med* 2003; 167:841-849, 2003.
- Robinson TE, Leung AN, Northway WH, et al, **Moss RB**. Composite spirometric-CT outcome measure in early cystic fibrosis lung disease. *Am J Respir Crit Care Med* 168:588-593, 2003.
- Carter BJ, Munson K, Burstein H, et al, **Moss R**. AAV-CFTR gene therapy for cystic fibrosis: retrospect and prospect. *Pediatric Pulmonology Suppl* 25: 159-160, 2003.
- Stevens DA, **Moss RB**, Kurup VP, et al. Allergic bronchopulmonary aspergillosis in cystic fibrosis--state of the art. *Clin Infect Dis* 37 Suppl 3:S225-264, 2003.
- Gibson RL, Emerson J, **Moss R** et al. Significant microbiological effect of inhaled tobramycin in young children with cystic fibrosis. *Am J Respir Crit Care Med* 167:841-849, 2003.
- Moss RB**, Rodman D, Spencer LT, et al. Repeated AAV2 aerosol mediated CFTR gene transfer to the lungs of patients with cystic fibrosis: a multicenter, double-blind, placebo controlled trial. *Chest* 125:509-521, 2004.
- Moss RB**. Lymphocytes in cystic fibrosis. *Clin Exp Immunol* 135:358-360, 2004.
- Moss RB**. Inhalational antibiotics for airways infections. *Exper Lung Res* 30: Suppl 1, 58-64, 2004.
- Dorsaneo D, Borowitz D, Sharp J, **Moss R**. Allergic bronchopulmonary aspergillosis with normal serum IgE in a child with cystic fibrosis. *Pediatr Allergy Asthma Immunol* 17:146-150, 2004.
- Bonnel AS, Song, SMH, **Moss RB**, et al. Quantitative air trapping analysis in children with mild cystic fibrosis lung disease. *Pediatr Pulmonol* 38:396-405, 2004.
- Schrijver I, Karnsakul W, **Moss R**, et al. Novel contributions to the Asian CFTR mutation spectrum: genotype and phenotype in Thai patients with cystic fibrosis. *Am J Med Genet* 133A:103-105, 2005.
- Schrijver I, Ramalingam S, **Moss R**, et al. Diagnostic testing by comprehensive mutation analysis in a large group of Hispanics: novel mutations and assessment of a population-specific mutation spectrum. *J Molec Diagnostics* 7:289-299, 2005.
- Moss RB**, Mayer-Hamblett N, Wagener J, Daines C, Hale K, Ahrens R, Gibson RL, Anderson P, Retsch Bogart G, Nasr SZ, Noth I, Waltz DA, Zeitlin P, Ramsey B, Starko K. A randomized, double-blind,

- placebo-controlled, dose-escalating study of aerosolized interferon gamma-1b in patients with mild to moderate cystic fibrosis lung disease. *Pediatr Pulmonol* 39:209-218, 2005.
- Robinson TE, Goris ML, Zhu HJ, Chen X, Bhise P, Sathi A, Sheikh F, **Moss RB**. Dornase alpha reduces air trapping in children with mild CF lung disease. *Chest* 128:2327-2335, 2005.
- Moss RB**. Fungal Allergy in Cystic Fibrosis. In Kurup VS, Ed. *Mold Allergy, Biology and Pathogenesis 2005*, Research Signpost, Trivandrum, Kerala India, 2005, pp. 93-104.
- Kurup VP, Knutsen AP, **Moss RB**. *Aspergillus* antigens and immunodiagnosis of allergic bronchopulmonary aspergillosis. In Kurup VS, Ed. *Mold Allergy, Biology and Pathogenesis 2005*, Research Signpost, Trivandrum, Kerala India, 2005, pp. 137-146.
- Moss RB**. Pathophysiology and immunology of allergic bronchopulmonary aspergillosis. *Medical Mycology* 43:S203-S206, 2005.
- Venkatraman R, Raman R, Raman B, **Moss RB**, Rubin GD, Robinson TE. Fully automated system for three-dimensional bronchial morphology analysis using volumetric multidetector computed tomography of the chest. *J Digit Imaging* ePub ahead of print, 13 Dec 2005.
- Xiao W, Hsu YP, Ishizaka A, Kirikae, **Moss RB**. Sputum cathelicidin, plasmin activation system components and cytokine patterns discriminate cystic fibrosis, chronic obstructive pulmonary disease and asthma from each other and healthy subjects. *Chest* 128:2316-2326, 2005.
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- Kurup VP, Knutsen AP, **Moss RB**, Bansal N. Demonstration of specific antibodies to recombinant *Aspergillus* allergens in cystic fibrosis patients with ABPA. *Clin Molec Allergy* 4:11, 2006 [Epub].
- Tirouvanziam R, Conrad CK, Bottiglieri T, Herzenberg LA, **Moss RB**, Herzenberg LA. High-dose oral N-acetylcysteine, a glutathione prodrug, modulates inflammation in cystic fibrosis. *Proc Natl Acad Sci USA* 103:4623-4633, 2006.
- Moss RB**. Critique of clinical trials in ABPA and fungal allergy. *Med Mycol* 44 Suppl:269-72, 2006.
- Clancy JP, Rowe SM, Bebok Z, Aitken ML, Gibson R, Zeitlin P, Berclaz P, **Moss R**, Knowles MR, Oster RA, Mayer-Hamblett N, Ramsey B. No detectable improvements in CFTR by nasal aminoglycosides in CF patients with stop mutations. *Am J Respir Cell Mol Biol* 2007 Mar 8; [Epub ahead of print]
- Moss RB**. Allergic Bronchopulmonary Aspergillosis. In Taussig LM, Landau LI, LeSouef PN, Martinez FD, Morgan WJ, Sly PD, Eds. *Pediatric Respiratory Medicine*, 2<sup>nd</sup> Ed, Elsevier, Toronto, 2008, in press.
- Moss RB**. Gene therapy for cystic fibrosis: rise and fall of a viral vector. *US Respiratory Disease* 2006; 40
- Moss RB**, Milla C, Colombo J, Accurso F, Zeitlin P, Clancy JP, Spencer T, Pilewski J, Waltz DA, Dorkin H, Ferkol T, Pian M, Ramsey B, Anklesaria P, Martin D, Heald AE. Repeated aerosolized AAV-CFTR for treatment of CF: a randomized placebo-controlled Phase IIB trial. *Human Gen Ther* 18:726-32, 2007.
- Gibson RL, Emerson J, Hamblett N, Burns JL, McNamara S, Accurso F, Konstan MW, Chatfield BA, Retsch-Bogart G, Waltz D, Acton J, Zeitlin P, Hiatt P, **Moss R**, Williams J, Ramsey BW. Duration of treatment effect after tobramycin solution for inhalation in young children with cystic fibrosis. *Pediatr Pulmonol* 42:610-23, 2007.
- Tirouvanziam R, Gernez Y, Conrad CK **Moss RB**, Schrijver I, Dunn CE, Davies ZA, Herzenberg LA, Herzenberg LA,. Profound functional and signaling changes in viable inflammatory neutrophils homing to cystic fibrosis lung airways. *Proc Natl Acad Sci USA* 105:4335-4339, 2008.
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- Moss RB**. Infection, inflammation and the downward spiral of cystic fibrosis lung disease. *J Pediatr* 154: 162-163, 2009.
- Moss RB**. Allergic bronchopulmonary aspergillosis. In: Latge JP, Steinbach WJ, Eds, *Aspergillus fumigatus and Aspergillosis*. American Society of Microbiology Press, Washington DC, 2009, Chpt 26, pp. 333-350.
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- Yuan N, Kane P, Shelton K, Matel J, Becker B, **Moss RB**. Safety, tolerability and efficacy of high frequency chest wall oscillation in pediatric patients with cerebral palsy and neuromuscular disorders: an exploratory randomized controlled trial. Submitted.