CURRICULUM VITAE

Richard Barry Moss, M.D.

PERSONAL INFORMATION

Date of Birth:	October 30, 1949
Place of Birth:	New York, NY
Citizenship status:	United States
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http://breathe.stanford.edu
http://www.bioscience.heacademy.ac.uk/ftp/employability/hmsbeagleinterviews.pdf

EDUCATION

Undergraduate:	Columbia University New York, NY Bachelor of Arts (1971)
Graduate:	State University of New York Downstate Medical Center New York, NY Doctor of Medicine (1975)

CLINICAL TRAINING

Internship and Residency:	Pediatrics (1975-77) Children's Memorial Hospital McGaw Medical Center Northwestern University Chicago, IL
Fellowships:	Allergy-Immunology (1977-79) Department of Pediatrics Stanford University Medical Center
	Pediatric Pulmonology (1980-81) Department of Pediatrics Stanford University Medical Center

PROFESSIONAL BACKGROUND

1981-1988	Assistant Professor of Pediatrics, Stanford University Medical School
1981-	Attending Physician, Children's Hospital at Stanford/Lucile Packard Children's Hospital at Stanford
1981-	Attending Physician, Stanford University Hospital
1981-1991	Associate Director, Cystic Fibrosis Center Children's Hospital at Stanford Stanford University Medical Center
1982; 1991-1994	Acting Chief, Division of Allergy-Immunology & Respiratory Medicine Department of Pediatrics Stanford University Medical School
1983-2001	Director, Allergy Reference Laboratory Children's Hospital at Stanford, Lucile Packard Children's Hospital at Stanford
1985-2005	Director, Ross Mosier Laboratory for Cystic Fibrosis Research Children's Hospital at Stanford/ Lucile Packard Children's Hospital at Stanford
1988-1994	Associate Professor of Pediatrics (Clinical), Stanford University School of Medicine
1989-1995	Co-Director, Allergy-Immunology Fellowship Training Program Stanford University School of Medicine
1991-	Director, Stanford Cystic Fibrosis Center
1994-1995	Chief, Division of Allergy-Immunology, & Respiratory Medicine Department of Pediatrics Stanford University Medical School
1994-2010	Professor of Pediatrics, Stanford University Medical Center
1995-2005	Chief, Division of Pulmonology Department of Pediatrics Stanford University Medical School

2005-2009	Chief, Division of Allergy-Immunology Department of Pediatrics Stanford University Medical School
2005-2010	Director, Allergy-Immunology Fellowship Training Program Stanford University School of Medicine
2010-	Emeritus Professor of Pediatrics (active recall) Stanford University

LICENSURE

1976	Illinois, T-7762
1977	California, G35650

BOARD CERTIFICATION

1976	National Board of Medical Examiners
1981	American Board of Pediatrics, certificate #6128
1981	American Board of Allergy and Immunology, certificate #2206
1986	Diagnostic Laboratory Immunology (Conjoint Board of the American Boards of Internal Medicine, Pediatrics, and Allergy-Immunology), certificate #38

HONORS, AWARDS, INVITED LECTURES

1970-1971	Dean's List, Columbia University
1974	Alpha Omega Alpha, National Honor Medical Society
1979	Travel Award, American Academy of Allergy and Immunology
1980-1981	Medical Research and Training Award, California Thoracic Society
1980-1981	American Lung Association Training Fellowship
1982	International Travel Award, National Institute of Allergy and Infectious Disease
1985	International Travel Award, International Association of Allergology and Clinical Immunology
1986	Invited Speaker, International Symposium on Clinical Immunology and the Role of IgG4, San Francisco, CA
1987	Invited Symposium Speaker, First North American Cystic Fibrosis Conference, Toronto, Canada

1990	Invited Plenary Speaker, 1990 International Cystic Fibrosis Conference and North American Cystic Fibrosis Conference, Washington, DC
1994-1995	Reviewer, Special Emphasis Panel for Tuberculosis Academic Awards, National Heart, Lung, and Blood Institute
1995-1996	Reviewer, Special Emphasis Panel for Asthma Academic Awards, National Heart, Lung, and Blood Institute
1996-1999	Consultant, The United States Pharmacopoeia Convention
1996	Consultant, Committee to Study Priorities for Vaccine Development, Division of Health Promotion and Disease Prevention, Institute of Medicine, National Academy of Sciences
1996	Reviewer, Special Emphasis Panel, Biological and Physiological Sciences, Division of Research Grants, National Institutes of Health
2003-	Reviewer, National Institutes of Health/National Center for Research Resources, General Clinical Research Centers site visit team
2003	Invited Plenary Speaker, North American Cystic Fibrosis Conference, Anaheim CA
2001-present	Marquis' *Who's Who in Medicine and Healthcare* Consumers' Research Council of America, *America's Top Pediatricians – Pulmonology* Best Doctors, Inc., *Best Doctors in America*
2003	CFRI Professional Excellence Award
2006	Marquis' *Who's Who in America*
2010	NIH-NHBLI Special Emphasis Panel Clinical Trials of Novel Therapy for Lung Diseases
2012	Invited Plenary Speaker, International Society of Human and Animal Mycology, Berlin Germany

PROFESSIONAL SOCIETIES
Fellow, American Academy of Allergy, Asthma, and Immunology
Fellow, American Academy of Pediatrics
Fellow, American College of Chest Physicians
Member, American Thoracic Society
Member, Pediatric Academic Society (elected 2005)

GRANTS and CONTRACTS - completed

1983-1984	NIH Biomedical Research Support Grant, "Blocking Antibodies to *Pseudomonas aeruginosa* in Cystic Fibrosis" (P.I.)
1983-1985	Miles Pharmaceuticals, Inc., "Multicenter Collaborative Project: *Pseudomonas aeruginosa* Endobronchial Infection in Cystic Fibrosis. A Prospective Double-blind Controlled Study of Two Antimicrobial Regimens," (Co-Investigator)
1984	MAST Immunosystems, Inc., "A Comparison of the MAST Inhalant Profile and the Phadezyme RAST" (P.I.)
1985-1986	Cystic Fibrosis Foundation G104 6-01, "Natural and Human Hybridoma CF Antipseudomonal Antibodies" (P.I.)
1986-1987	Beecham Pharmaceuticals, Inc., "A Multicenter Observer-blind Study of Antibiotic Therapy of *Pseudomonas aeruginosa* Bronchopulmonary Infection in Cystic Fibrosis: Comparison of Three Antimicrobial Drug Regimens," (Co-Investigator)
1986-1987	Glaxo Pharmaceuticals, Inc., "Extended Home Intravenous Therapy in Cystic Fibrosis Patients," (Co-Investigator)
1986-1990	National Heart, Lung, and Blood Institute RO1 HL36796, "Late Sequelae of Bronchopulmonary Dysplasia" (Co-P.I. with William Northway)
1987	3M Diagnostic Systems, Inc., "Comparison of Phadezyme RAST to 3M Diagnostic Systems FAST for Specific IgE" (P.I.)
1987-1989	E.R. Squibb & Sons, Inc., "Evaluation of the Immunologic Cross-Reactivity of Aztreonam Therapy in Cystic Fibrosis Patients Allergic to Penicillin and/or Cephalosporin Antibiotics" (Stanford P.I.)
1990-1991	Cystic Fibrosis Research, Inc., "Mechanism of β-Lactam Drug Allergy in Cystic Fibrosis" (P.I.)

1991-2009	Cystic Fibrosis Foundation, "Stanford Cystic Fibrosis Care Center" (Center Director)
1991-1992	Stanford Office of Technology Research Incentive Fund, "Evaluation of Maxillary Sinus Treatments in Patients with Antrostomies" (Co-Investigator)
1991-1993	Genentech, Inc.,"A Phase III, Multicenter, Double-blind, Placebo-controlled, Parallel Study to Evaluate the Safety and Efficacy of Aerosolized Recombinant Human DNase I in Patients with Cystic Fibrosis" (Stanford P.I.)
1992-1993	Genentech, Inc., "A Phase II, Multicenter, Double-blind, Placebo-controlled, Parallel Study to Evaluate the Safety and Efficacy of Aerosolized Recombinant Human DNase I in Hospitalized Patients with Cystic Fibrosis Experiencing Acute Pulmonary Exacerbations" (Stanford P.I.)
1992-1993	Genentech, Inc., "A Multicenter Open-label Treatment Protocol to Provide Aerosolized rhDNase Therapy to Patients with Cystic Fibrosis" (Stanford P.I.)
1992-1994	Genentech, Inc., "A Multicenter Epidemiologic Protocol to Evaluate Pulmonary Function and the Rate of Respiratory Tract Infections in Patients with Cystic Fibrosis" (Stanford P.I.)
1992-1993	Cystic Fibrosis Foundation, "CFTR Expression in Human T Cell Clones" (Co-Investigator)
1993	Genentech, Inc., "A Randomized Multicenter Study to Evaluate the Safety and Efficacy of Aerosolized Recombinant Human DNase I administered with Three Different Nebulizers in Patients with Cystic Fibrosis" (Stanford P.I.)
1993	Genentech, Inc., "A Multicenter, Double-blind, Placebo-controlled Protocol to Evaluate the Safety and Efficacy of Aerosolized Recombinant human DNase I Therapy in Patients with Cystic Fibrosis Who Have Advanced Lung Disease" (Stanford P.I.)
1993-1994	Cystic Fibrosis Foundation, "CFTR, Chloride Conductance, and Immunocompetence in T Cells" (Co-Investigator)

1993-1994	Genentech, Inc., "Effect of Device Resistance and Dynamic Lung Function on Peak Inspiratory Flow Rates in Chronic Obstructive Lung Diseases" (Co-investigator)
1993-1994	Univax Biologics, Inc., "A Single-blind, Multi-Center, Study to Evaluate the Safety and Pharmacokinetics of a Hyperimmune Immunoglobulin Intravenous Targeted Against Mucoid *Pseudomonas aeruginosa* in Patients with Cystic Fibrosis" (P.I.)
1992-1995	NIH RO1 DK 45910-01, "Ursodeoxycholic Acid Therapy in Patients with Cystic Fibrosis-Associated Liver Disease" (Stanford Co-P.I. with Ricardo Castillo)
1994-1995	PathoGenesis, Inc., "A Phase II Clinical Trial to Compare Safety, Efficacy and Pharmacokinetics of an Aminoglycoside (Tobramycin) Formulation Administered by 3 Different Nebulizer Delivery Systems to Patients with Cystic Fibrosis" (Stanford P.I.)
1994-1996	Genentech, Inc., "A Phase IV, Multicenter Study to Monitor the Long-term Safety and Efficacy of Pulmozyme in Cystic Fibrosis Patients Who Participated in a Phase III Trial" (Stanford P.I.)
1994-1995	Smith Kline Beecham, Inc., "A Multicenter, Double-Blind, Placebo-Controllled, Parallel-Group Comparison of the Safety and Efficacy of Oral Twice-Daily Administration of SB205312 with Inhaled Vanceril in Patients with Mild to Moderate Asthma" (Stanford P.I.)
1994-2005	Genentech, Inc., "Epidemiologic Study of Cystic Fibrosis" (Stanford P.I.)
1995-1996	PathoGenesis, Inc., "A Phase III Placebo Controlled Trial to Study the Safety and Efficacy of Tobramycin for Inhalation in Patients with Cystic Fibrosis" (Stanford P.I.)
1995-1996	Univax Biologicals, Inc./North American Biologicals, Inc., "A Randomized, Multi-Center, Double-Blind, Placebo Exopolysaccharide *Pseudomonas aeruginosa* Immune Globulin Intravenous (Human) (MEP IGIV) in Reducing the Frequency of Acute Pulmonary Exacerbation in Patients with Cystic Fibrosis" (Stanford P.I.)
1995-1996	Cystic Fibrosis Foundation, "Assessment of Safety and Efficacy of Nebulizers" (Stanford P.I.)

1995-1996	NCRR General Clinical Research Center M01 RR00070/ Cystic Fibrosis Research, Inc./Targeted Genetics, Inc., "Phase I Evaluation of Adeno-Associated Virus Mediated Gene Transfer of the Cystic Fibrosis Transmembrane Conductance Regulator in the Maxillary Sinus of Patients with Antrostomies" (Co-Investigator)
1996-1997	Cystic Fibrosis Research, Inc., “T Cells in Cystic Fibrosis: Interleukin 10 Deficiency” (P.I.)
1996-1997	Immuno Clinical Research Corp., "A Revised Open-label Study of C1-Inhibitor (Human) Vapor Treated Immuno as a Therapeutic Agent for Acute Attacks of Hereditary Angioedema (Stanford P.I.)
1996-1997	Medical Graphics, Inc., "Electron Beam Computed Tomography of the Chest in Patients with Cystic Fibrosis" (co-P.I. with Terry Robinson)
1996-1998	PathoGenesis, Inc., "An Open-Label Follow-On Trial of Tobramycin Solution for Inhalation in Patients with CF" (Stanford P.I.)
1996-1998	SciClone Pharmaceuticals, Inc., "A Phase I Trial of CPX in Adult Patients with Mild Cystic Fibrosis" (CPX-CLP-PCO-11/19/96-00) (Stanford P.I.)
1996-1998	NCRR General Clinical Research Center M01 RR00070/ Cystic Fibrosis Research, Inc./Targeted Genetics, Inc., "Phase II Evaluation of Adeno-Associated Virus Mediated Gene Transfer of the Cystic Fibrosis Transmembrane Conductance Regulator in the Maxillary Sinus of Patients with Antrostomies" (Co-Investigator)
1996-1998	Cystic Fibrosis Research, Inc., "Electron Beam Computed Tomography, Pulmonary Function, and Exercise Endurance During a Pulmonary Exacerbation in Patients with Cystic Fibrosis" (P.I.)
1996-1998	The DuPont Merck Pharmaceutical Company, "A Phase IIA Dose-Escalation Study to Evaluate the Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of Multiple Doses of DMP 777 in Adult Patients 18 Years of Age and Older with Cystic Fibrosis" (Stanford P.I.)
1997-1999	The DuPont Merck Pharmaceutical Company "A Phase IIA Multiple Dose-Escalation Study to Evaluate the Lung-Specific Bioefficacy of Three Different Dose Levels of

	DMP 777 in Adult Patients 18 Years of Age and Older with Cystic Fibrosis" (Stanford P.I.)
1997-1999	Cystic Fibrosis Foundation, "High Resolution CT Imaging in Mild Cystic Fibrosis Pulmonary Disease Using Electron Beam Computed Tomography" (P.I.)
1998-2000	Genentech, Inc., "A Multicenter, International, Randomized, Placebo-controlled, Double-blind Study to Determine the Effect of Pulmozyme® on Pulmonary Function Over 96 Weeks in Subjects with Cystic Fibrosis Aged 6-10 Years" (Stanford P.I.)
1998-2000	Targeted Genetics, Inc., "A Phase I Study of Aerosolized tgAAVCF for the Treatment of Cystic Fibrosis Patients with Mild Lung Disease" (Stanford P.I.)
1998	Genentech, Inc., "Validation of a Disease-specific Quality of Life Questionnaire for Cystic Fibrosis" (Stanford P.I.)
1998-2003	Cystic Fibrosis Foundation, "Aminoglycoside versus Conventional Therapy Combined with Beta-Lactam in Cystic Fibrosis Patients with Pulmonary Exacerbations" (Stanford P.I.)
1999-2000	IntraBiotics Pharmaceuticals, Inc., "A Phase I, Randomized, Placebo-controlled, Double-blind, Multicenter Safety and Tolerability Study of Ascending Multiple Inhaled Doses of IB-367 in Adult Patients with Cystic Fibrosis" (Stanford P.I.)
1999-2001	Cystic Fibrosis Foundation, "Diabetes Therapy to Ameliorate Protein Catabolism in CF" (Stanford P.I.)
1999-2001	Chiron Corp., “A Phase II Multicenter Randomized Trial of Tobramycin for Inhalation in Young Children with Cystic Fibrosis” (Stanford P.I.)
1999-2001	AstraZeneca, Inc., “Safety and Efficacy Study of Two Dosage Levels of Pulmicort Respules vs Placebo in Infants 6 to 12 Months with Mild-Moderate Asthma” (Stanford P.I.)
1999-2009	Cystic Fibrosis Foundation Therapeutics, Inc., “Therapeutics Development Network Center” Site (P.I. to 2009)
2000-2001	Medimmune Inc., “A Phase IV Study of the Safety of

	Synagis® (Palivizumab) for Prophylaxis of Respiratory Syncytial Virus in Children with Cystic Fibrosis" (Stanford P.I.)
2000-2002	Intermune, Inc., "A Phase I/II Study of Interferon Gamma-1b by Inhalation for the Treatment of Patients with Cystic Fibrosis" *(National P.I.)*
2001-2003	Targeted Genetics, Inc., "A Multicenter, Double-Blind, Placebo-Controlled, Phase II Study of Aerosolized tgAAVCF in Cystic Fibrosis Patients with Mild Lung Disease *(National P.I.)*
2001-2002	Cystic Fibrosis Foundation Therapeutics, Inc., "Standardization of the Measurement of the Nasal Membrane Transepithelial-Potential Difference" (Stanford P.I.)
2001-2002	Cystic Fibrosis Foundation Therapeutics, Inc., "Validation of Sputum Induction as Outcome Measure for Lower Airway Sampling in Patients with Cystic Fibrosis" (Stanford P.I.)
2001-2002	Boehringer Ingelheim, "A Randomized, Double-blind Within Dose, Placebo-controlled study to investigate the Safety, Tolerability and Pharmacokinetics of Increasing Oral Doses of BIIL 284 BS in Adult and Pediatric Cystic Fibrosis Patients" (Stanford P.I.)
2001-2002	Boehringer Ingelheim, "A randomized, double-blind within dose, placebo-controlled study to investigate the safety, tolerability and pharmacokinetics of repeated oral doses (15-day dosing) of BIIL 284 BS in adult and pediatric cystic fibrosis patients" (Stanford P.I.)
2001-2003	Cystic Fibrosis Foundation Therapeutics, Inc., "Standardization of Cystic Fibrosis Sweat Rate Procedure" (Stanford P.I.)
2001-2004	Chiron Corp., "An Open Label Study of Tobramycin for Inhalation in Young Children with Cystic Fibrosis" (Stanford P.I.)
2001-2003	Cystic Fibrosis Foundation Therapeutics, Inc., "Cystic Fibrosis Twin Study" (Stanford P.I.)

2001-2006	NIH-NIDDK, “Diabetes Therapy to Improve Muscle Mass and Clinical Status in CF Subjects with Abnormal Glucose Tolerance” (Stanford P.I.)
2001-2005	Cystic Fibrosis Foundation Therapeutics, Inc., “Evaluation of Pulmonary Function Tests from Raised Lung Volumes as Outcome Measures for Clinical Trials in Infants with Cystic Fibrosis” (Stanford P.I.)
2002-2003	Altus Biologics, Inc., “A Phase I, Open-Label Safety and Tolerability Study of Oral TheraCLEC-Total in Subjects with Cystic Fibrosis" (Stanford P.I.)
2003-2004	Boehringer Ingelheim, Inc, "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" (Stanford P.I.)
2003-2004	Inspire Pharmaceuticals, Inc., "A Multi-Center, Double-Blind, Randomized, Placebo-Controlled, 28-Day Study of INS37217 Inhalation Solution in Subjects with Mild to Moderate Cystic Fibrosis Lung Disease" (Co-investigator)
2003-2004	Chiron, “A Phase I Single-dose, Dose-escalation Trial Comparing Safety, Pharmokinetics and Delivery Time of Tobramycin Dry Powder for Inhalation Administered by Nektar T-326 Dry Powder Inhaler Device to Tobramycin Solution for Inhlalation Administered by a Pari LC Plus Jet Nebulizer/DeVilbiss PulmoAide Compressor in Cystic Fibrosis Patients” (Co-investigator)
2003-2004	Corus Pharma, “A Blinded, Multicenter, Randomized, Placebo-Controlled Trial with Aztreonam for Inhalation in Cystic Fibrosis Patients with Lung Disease Due to P. aeruginosa Infection” (Co-investigator)
2003-2004	Altus Biologicals, Inc., “A Phase 2, Active Run-in Randomized, Double Blind Dose Ranging Study of Oral TheraCLEC-Total in Cystic Fibrosis Subjects with Exocrine Pancreatic Insufficiency” (P.I.)
2003-2005	Thrasher Foundation, “Improving Health Care Outcomes of Children and Adolescents with Chronic Disease” (Co-PI with David Bergman MD)
2003-2005	Targeted Genetics, Inc., “A Multicenter, Double-blind, Placebo-Controlled Phase II Study of Aerosolized

	tgAAVCF for the Treatment of Cystic Fibrosis" *(National P.I.)*
2003-2006	Cystic Fibrosis Foundation, "A Study of the Effects of Glutathione and N-Acetylcysteine on Lung Inflammation in Cystic Fibrosis Patients" (Co-investigator)
2005- 2006	Genentech, Inc, "A Phase II Randomized Double-blind Parallel-Group Placebo-Controlled Oral Food Challenge Trial of Xolair® (Omalizumab) in Peanut Allergy" (Stanford P.I.)
2004-2006	Cystic Fibrosis Foundation Therapeutics, Inc., "Assessment of Induced Sputum as a Tool to Evaluate Anti-inflammatory Agents in Patients with Cystic Fibrosis" (Stanford P.I.)
2005-2006	Corus Pharma, "A Phase 3, Double-blind, Multicenter, Randomized, Placebo-controlled Trial with Aztreonam Lysinate for Inhalation in Cystic Fibrosis Patients with Pulmonary P. aeruginosa Requiring Frequent Antibiotics" (Stanford P.I.))
2005-2006	Corus Pharma, "A Phase 3 Follow-on Study of Multiple Courses of Aztreonam Lysinate for Inhalation for Cystic Fibrosis Patients Needing Anti-pseudomonal Antibiotics" (Stanford P.I.)
2005-2006	Inspire Pharmaceuticals, Inc., "A Multi-Center, Double-Blind, Randomized, Placebo-Controlled, 28-Day Study of Denufosol Tetrasodium (INS37217) Inhalation Solution in Patients with Cystic Fibrosis Lung Disease" (Stanford P.I.)
2005-2007	Dyax, Inc "An Ascending Four Dose Placebo Controlled Study to Assess the Efficacy and Tolerability of DX-88 (Recombinant Plasma Kallikrein Inhibitor) Adminstered Following Onset of Acute Attacks of Hereditary Angioedema (Stanford P.I.)
2005-2007	Oxnard Foundation, "A Phase I/II Single Center Blinded Randomized Controlled Study of Xolair in Subjects with Moderate to Severe Atopic Dermatitis with Food Allergy" (P.I.)
2005-2007	Genentech, Inc, " An Epidemiologic Study of Xolair® (Omalizumab): Evaluating Clinical Effectiveness and Long-Term Safety in Patients with Moderate to Severe Asthma" (Stanford P.I.)

2005-2010	Cystic Fibrosis Foundation Therapeutics, Inc., "Effectiveness and Safety of Intermittent Antimicrobial Therapy for the Treatment of New Onset Pseudomonas aeruginosa Airway Infection in Young Patients with Cystic Fibrosis" (Stanford P.I.)
2006-2009	Inspire Pharmaceuticals Inc, "A Multi-Center, Double-Blind, Placebo-Controlled, Randomized, Efficacy and Safety Study of Denuofosol Tetrasodium (INS37217) Inhalation Solution in Patients with Mild Cystic Fibrosis Lung Disease" (Stanford P.I.)
2006- 2007	Eurand, "An Open-Label Study to Evaluate the Safety and Efficacy of Eurand Pancreatic Enzyme Product Microtabs in Pediatric Patients with Cystic Fibrosis and Exocrine Pancreatic Insufficiency" (Stanford P.I.)
2006-2008	PTC Therapeutics, "A Phase 2 Study of PTC124 as an Oral Treatment for Nonsense Mutation Mediated Cystic Fibrosis" (Stanford P.I.)
2006-2007	Dyax, Inc and Genzyme, "EDEMA3: A Double-Blind, Placebo Controlled Study Followed by a Repeat Dosing Phase to Assess the Efficacy and Safety of DX-88 for the Treatment of Acute Attacks of Herediatry Angioedema" (Stanford P.I.)
2007- 2008	Mpex Pharmaceuticals, Inc., "A Phase 1, Single- and Multi-dose, Single-blind, Placebo-control, Randomized Dose-escalation Study to Evaluate the Safety, Tolerability and Pharmacokinetic Profile of MP-376 Solution for Inhalation at up to Three Dose Levels Delivered by the Pari eFlow® Electronic Nebulizer for 14 days to Stable Cystic Fibrosis Patients" (Stanford P.I.)
2007-2008	GlaxoSmithKline, "An open label, dose-ascending, single-dose study to investigate the pharmacokinetics of SB-656933 in subjects with cystic fibrosis" (*National P.I.)*
2007-2008	Altus Biologicals, Inc. "A Phase III, Randomized, Double-Blind, Placebo-Controlled ClinicalStudy Evaluating the Efficacy and Safety of ALTU-135 Treatment in Patients with Cystic Fibrosis-Related Exocrine Pancreatic Insufficiency" (Stanford P.I.)
2007-2009	Vertex Pharmaceuticals, Inc., "A Phase 2a, Randomized, Double-Blind, Placebo Controlled Study of VX-770 to

	Evaluate Safety, Pharmacokinetics, and Biomarkers of CFTR Activity in Cystic Fibrosis (CF) Subjects with Genotype G551D" (Stanford P.I.)
2007-2008	Stanford Center for Clinical and Translational Education and Research, "Addressing a Critical Bottleneck in Cystic Fibrosis Trials: An Integrative Tool for Small Metabolite-Based Outcomes" (P.I.)
2008-2010	Inspire Pharmaceuticals Inc, "A Phase 3, International, Multi-center, Randomized, Double-blind, Placebo-controlled, Parallel-Group Efficacy and Safety Study of Denufosol Tetrasodium Inhalation Solution in Patients with Cystic Fibrosis Lung Disease" (Stanford P.I.)
2009-2010	Gilead, "A Phase 2, Double-Blind, Multicenter, Randomized, Placebo-Controlled Trial Evaluating Fosfomycin/Tobramycin for Inhalation in Patients with Cystic Fibrosis and *Pseudomonas aeruginosa"* (Stanford P.I)
2009-2010	Vertex Pharmaceuticals, "A Randomized, Double-Blind, Placebo-Controlled, Multiple Dose Study of VX-809 to Evaluate Safety, Pharmacokinetics, and Pharmacodynamics of VX-809 in Cystic Fibrosis Subjects Homozygous for the DeltaF508-*CFTR* Gene Mutation" (Stanford P.I.)
2010-2011	Inspire, "Open-label Extension of Study 08-110 -- A Multi-Center Study of Denufosol Tetrasodium Inhalation Solution in Patients with Cystic Fibrosis Lung Disease" (Stanfor P.I.)
2006-2011	Novartis, "Natural History of Progressive CF Lung Disease Utilizing Controlled Volumetric Lung CT Imaging, Pulmonary Function Measurements, Sputum Indices, and Clinical Scores in Children with Mild to Moderate CF Lung Disease (Co-Investigator)
2007-10	Cystic Fibrosis Foundation Therapeutics, Inc., "PharmaNAC: A Multi-Center, Phase IIB, Randomized, Placebo-controlled, Double-Blind Study Of The Effects Of N-Acetylcysteine On Redox Changes and Lung Inflammation In Cystic Fibrosis Patients" (Co-investigator)
2007-10	Cystic Fibrosis Foundation Therapeutics, Inc., "Cell-based multifactorial analysis of CF pulmonary exacerbations" (Co-investigator)

2008-11	Cystic Fibrosis Foundation Therapeutics, Inc., "Electronic Data Capture for NPD Studies" (Stanford P.I.)
2009-11	GlaxoSmithKline, "A Randomized, Double Blind, Parallel Group, Placebo Controlled 28 Day Study to Investigate the Treatment Effects and Pharmacodynamics of SB-656933 in Patients with Cystic Fibrosis " (National P.I.)
2010-11	Vertex Pharmaceuticals, "A Phase 2, Open-Label, Randomized, Multiple Dose Study to Evaluate Safety, Pharmacokinetics, andPharmacodynamic of VX-809 and VX-770 in Cystic Fibrosis Subjects Homozygous for the F508del-CFTR Mutation" (Stanford P.I.)
2009-2011	PTC Therapeutics, "A Phase 3 Efficacy and Safety of PTC124 as an Oral Treatment for Nonsense-Mutation Mediated Cystic Fibrosis" (Stanford P.I.)
2009-2011	Vertex Pharmaceuticals, "A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study to Evaluate the Efficacy and Safety of VX-770 in Subjects with Cystic Fibrosis and the G551D Mutation" (Stanford P.I.)

ACTIVE GRANTS

2001-	NIH-NHLBI, "Genetic Modifiers in Cystic Fibrosis Lung Disease" (Co-investigator)
2005-	Cystic Fibrosis Foundation Therapeutics, Inc., "Longitudinal Assessment of Risk Factors for and Impact of Pseudomonas aeruginosa Acquisition in Children with Cystic Fibrosis" (Stanford P.I.)
2008-2012	Cystic Fibrosis Foundation Therapeutics, Inc., "Translational Therapeutics Development Center" (Co-investigator)
2011-2012	PTC Therapeutics, "A Phase 3 Efficacy and Safety of PTC124 as an Oral Treatment for Nonsense-Mutation Mediated Cystic Fibrosis, Extension Study" (Stanford P.I.)
2011-	Vertex Pharmaceuticals, "A Phase 2, Multicenter, Double-Blinded, Placebo-Controlled, Multiple-Dose Study to Evaluate Safety, Tolerability, Efficacy, Pharmacokinetics and Pharmacodynamics of VX-809 Alone and in Combination with VX-770 in Subjects with Cystic Fibrosis, Homozygous or Heterozygous for the *F508del-*

	CFTR Mutation" (Stanford P.I.)
2011-2012	CFRI, "CF-ABPA, An Increasing Threat for CF Patients: Clinically Relevant Tools for Diagnosis and Monitoring" (P.I.)
2012-	Genentech, "Complex Biological Mechanisms in Chronic Bronchopulmonary Aspergillosis" (P.I.)
2012-	Vertex Pharmaceuticals, "A Phase 3, Randomized, Double Blind, Placebo-Controlled, Parallel-Group Study to Evaluate the Efficacy and Safety of Ivacaftor in Subjects With Cystic Fibrosis who Have the *R117H-CFTR* Mutation" (National P.I.)
2013-	Vertex Pharmaceuticals, "A Phase 3, Randomized, Double Blind, Placebo-Controlled, Parallel-Group Study to Evaluate the Efficacy and Safety of Lumacaftor in Combination with Ivacaftor in Subjects Aged 12 Years and Older With Cystic Fibrosis, Homozygous for the F508del-CFTR Mutation" (P.I.)
2013-	N30 Pharmaceuticals, "A Phase 1b, Randomized, Double-blind, Placebo-controlled, Dose Escalation Study of N6022 to Evaluate Safety and Pharmacokinetics in Subjects with Cystic Fibrosis Homozygous for the F508del-CFTR Mutation" (P.I.)

STANFORD UNIVERSITY MEDICAL CENTER COMMITTEES AND SERVICE

Chair, Pharmacy and Therapeutics Committee Children's Hospital at Stanford	1982-1991
Evaluation and Planning Committee, Department of Pediatrics Stanford University School of Medicine	1982-1983
Committee on Research, Department of Pediatrics Stanford University School of Medicine	1984-1985
Chair, Pharmacy Task Force Academic Program Committee Lucile Salter Packard Children's Hospital	1985-1986
Quality Assurance Committee Children's Hospital at Stanford	1985-1991
Respiratory Therapy Task Force, Academic Program Committee Lucile Salter Packard Children's Hospital	1985-1986
Committee on the Pediatric Residency, Department of Pediatrics Stanford University School of Medicine	1986-1987
Chair, Task Force on Postoperative Care Children's Hospital at Stanford	1988
Search Committee, Chief Operating Officer Lucile Salter Packard Children's Hospital	1989
Quality Improvement Committee Lucile Salter Packard Children's Hospital	1991-1993
Nutrition and Total Parenteral Nutrition Committee Lucile Salter Packard Children's Hospital	1991-1998
Infection Control Committee Lucile Salter Packard Children's Hospital	1992-
Home Health Care Committee Lucile Salter Packard Children's Hospital	1992-1997
Physician Hospital Organization Utilization Management/Quality Assurance Committee Lucile Salter Packard Children's Hospital	1994-1996

Dean's Task Force on Gene Therapy Stanford University School of Medicine	1994
Genetics Chief Search Committee Department of Pediatrics Stanford University School of Medicine	1994
Chair, Pulmonary Division Chief Search Committee Department of Pediatrics Stanford University School of Medicine	1995-1996
Documentation & Compliance Committee Lucile Salter Packard Children's Hospital	1998-
Ambulatory Services & Space Task Force Lucile Salter Packard Children's Hospital	1998-2000
Asthma, Pulmonary and TB Planning Group Children's Health Initiative UCSF Stanford Health Care	1999
GCRC Oversight & Review Committee NIH-NCCR General Clinical Research Center Stanford University Medical Center	1999-
Clinical Operations & Budget Committee Lucile Packard Children's Hospital	2000-
Faculty Practice Organization Management Committee Lucile Packard Children's Hospital	2004-
FPO Ambulatory Center Quality Improvement Committee Lucile Packard Children's Hospital	2004-
Co-Director, Children's Health Research Program Stanford University Medical Center	2006-9
Member, Pediatrics Mentoring Program Spectrum Child Health, Stanford University	2007-
Lecturer, Bioscience 109B, Genetic Diversity and Personalized Medicine Stanford University School of Medicine	2008
Chair, Search Committee University Tenure Line Faculty, Pulmonary Biology	2008-

Executive Committee
Stanford Center for Clinical and Translational
Education and Research - Spectrum Child Health 2008-

Member, Scientific Review Panel
Spectrum Child Health, Stanford University 2008-

Quality of Care Review Committee
Pulmonary and Critical Care Medicine
Lucile Packard Children's Hospital at Stanford 2009-

Stanford University
Administrative Panel on Human Subjects in Medical
Research (IRB) 2010-

EXTRAMURAL PROFESSIONAL COMMITTEES & ACTIVITIES

Ad Hoc Grant Reviewer
March of Dimes 1985

External Advisory Board
NIH Cystic Fibrosis Research Center
Case Western Reserve Medical School 1985-1991

Ad Hoc Grant Reviewer
Canadian Cystic Fibrosis Foundation 1986, 1997, 2006-

Clinical Research Grant Review Committee
Cystic Fibrosis Foundation 1987-

Section Abstract Reviewer
North American Cystic Fibrosis Conference 1988-1992, 1995-1998, 2004

Site Visit Review Board
Cystic Fibrosis Foundation 1988

Chairman, GAP Conference on Infection, Immunity
and Inflammation
Cystic Fibrosis Foundation 1988

Scientific Advisory Panel on Allergy and Immunology
California Medical Association 1990-1995

Ad Hoc Grant Reviewer
Cystic Fibrosis Research, Inc. 1991-

Immunotherapy Advisory Board
Cystic Fibrosis Foundation & Univax Biologicals, Inc. 1992-1994

Chair, Data Safety Monitoring Committee
National Multicenter Controlled Pentoxifylline Trial
in Patients with CF Hoechst-Roussel, Inc. 1993-1995

Special Emphasis Panel on Asthma Academic Awards
National Heart, Blood and Lung Institute 1994-1995

Special Emphasis Panel on Tuberculosis Academic Awards
National Heart, Blood and Lung Institute 1994-1995

Data Safety Monitoring Committee
Multicenter Controlled Exosurf Trial in Patients with CF
Burroughs-Wellcome, Inc. 1995

North American Conference Planning Committee
Cystic Fibrosis Foundation 1995-1998, 2004

Clinical Practice Guidelines Committee
Cystic Fibrosis Foundation 1995-1996

Merrem® Advisory Board
Zeneca Pharmaceuticals, Inc. 1995-1996

Ad Hoc Grant Reviewer
National Science Foundation of Switzerland 1995, 1999

Committee to Study Priorities for Vaccine Development
Institute of Medicine
National Academy of Sciences 1996

Ad Hoc Grant Reviewer
Cystic Fibrosis Association of Germany 1996

Ad Hoc Grant Reviewer
Canadian Cystic Fibrosis Foundation 1997-

Steering Committee
CFF Therapeutics Development Center Network 1999-

The Chest Foundation
American College of Chest Physicians
Clinical Research Trainee Awards Committee 2001-

California Medical Association
Advisory Board for Chest Diseases 2001-

Chair, Protocol Review Committee CFF Therapeutics Development Network	2002-2005
GCRC Site Review Committee NIH-National Center for Research Resources	2002
Speaker, Respiratory and Allergic Disease Foundation	2006-
Ad Hoc Reviewer, Italian CF Foundation	2007-
Ad Hoc Reviewer, Irish CF Foundation	2005-
American Academy of Allergy Asthma and Immunology Task Force on Fungal Diseases of the Lower Airway	2009-2010
Cystic Fibrosis Foundation National Resource Center Review Committee	2010
NIH-NHBLI Special Emphasis Panel Clinical Trials of Novel Therapy for Lung Diseases	2010
American Academy of Allergy, Asthma and Immunology Task Force on Fungal Diseases of the Lower Airway	2010-11
International Society for Human and Animal Mycology Working Group on Allergic Bronchopulmonary Aspergillosis in Asthma	2012-
External Advisory Committee, University of Pittsburgh Cystic Fibrosis Research Program, NIH P30/CFF RDP	2012
Cystic Fibrosis Foundation Translational Advisory Group	2012-

JOURNAL EDITORIAL OFFICE

Associate Editor, *Medical Mycology* 2006-2009

JOURNAL MANUSCRIPT REVIEWER **(*reviews in 2012-13)**

American Journal of Asthma and Allergy for Pediatricians
American Journal of Clinical Nutrition
American Journal of Respiratory and Critical Care Medicine*
American Journal of Respiratory Cell and Molecular Biology
Annals of Allergy
BMJ Quality and Safety*
Chest*
Clinical and Diagnostic Laboratory Immunology

Clinical Journal of Sports Medicine
Clinical Immunotherapeutics
Clinical Reviews in Allergy
European Respiratory Journal*
Expert Opinion on Investigational Drugs
Expert Reviews Ltd
Expert Review of Anti-Infective Therapy
Future Medicine*
Infection and Immunity
International Archives of Allergy and Applied Immunology
Human Gene Therapy
Journal of Adolescent Health
Journal of Allergy and Clinical Immunology
Journal of Asthma
Journal of Clinical Investigation
Journal of Clinical Microbiology
Journal of Cystic Fibrosis*
Journal of Infectious Diseases
Journal of Infection and Public Health
Journal of Invasive Fungal Infection
Journal of Pediatrics
The Lancet
Medical Mycology
Mycoses
Pediatric Allergy and Asthma
Pediatric Allergy, Immunology, and Pulmonology
Pediatric Drugs
Pediatric Infectious Disease Journal
Pediatric Pulmonology*
Pediatric Research
Pediatrics
PLoS One*
Proceedings of the National Academy of Sciences USA
Respiratory Research
Thorax*
UpToDate, Inc (Pediatrics)*

SYMPOSIA, CONFERENCES, AND SESSIONS ORGANIZED

Symposium on Rhinitis: Differentiation and Management in Primary Care Practice, Napa, CA, January 27-28, 1984. Co-sponsored by American Academy of Allergy & Immunology and American Academy of Family Practice. Chair.

GAP Conference on Infection, Immunity and Inflammation in Cystic Fibrosis, Williamsburg, VA, June 6-9, 1988. Sponsored by Cystic Fibrosis Foundation. Co-Chair.
Session on Intravenous Immunoglobulin, Protease Inhibitors and Other New Therapies, Fifth Annual North American Cystic Fibrosis Conference, Dallas, TX, October 2-5, 1991. Sponsored by Cystic Fibrosis Foundation. Co-Chair.

Workshop on Clinical Anti-Inflammatory Interventions, Tenth Annual North American Cystic Fibrosis Conference, Orlando, FL, October 24-27, 1996. Co-Chair.

Northern California Cystic Fibrosis Center Physicians and Coordinators Meeting, Napa CA, May 30, 1998. Chair.

Advances in Inhaled Antibiotic Therapy, San Francisco CA, October 9, 1998. Chair.

Lung Disease in Immunoglobulin Deficiency Syndromes. Sunrise Seminar, American Thoracic Society, San Diego CA, April 26, 1999. Co-chair.

Consensus Conference on Allergic Bronchopulmonary Aspergillosis. Cystic Fibrosis Foundation, Bethesda MD, June 12-13, 2001. Co-Chair.

Symposium on Non-CF Bronchiectasis and ABPA, North American CF Conference, Orlando FL, October 27, 2001. Co-Chair with Jim Yankaskas.

Symposium on Asthma and ABPA, North American CF Conference, Orlando FL, October 4, 2002. Chair.

Cystic Fibrosis Foundation Williamsburg Conference, Inflammation Session, Williamsburg VA, June 2, 2003. Co-Chair.

Advances Against Aspergillosis International Conference, San Francisco CA, Sept 9-11, 2004. Organizing Committee and Session Chair.
Workshop on New Approaches to Prevent CF Pulmonary Decline, North American CF Conference, October 2006. Co-Chair.

2nd Advances Against Aspergillosis International Conference, Athens Greece, February 22-25, 2006. Organizing Committee and Session Chair.

3rd Advances Against Aspergillosis International Conference, Miami FL, Jan 2008. Organizing Committee.

Allergic Disease in CF – Manifestations and Management. North American CF Conference, October 17, 2009, Symposium Chair.

4th Advances Against Aspergillosis International Conference, Rome Italy, February 3-6, 2010, Organizing and Scientific Committee. Session Co-Chair. Speaker.

5th Advances Against Aspergillosis International Conference, Istanbul Turkey, January 26-28, 2012. Scientific Committee. Session Moderator. Speaker.

INVITED PRESENTATIONS (**selections from 2000-present**)

Children's National Medical Center, Washington DC, January 19, 2000. CF - New Insights and Therapies. Pediatric Grand Rounds.

American College of Chest Physicians/American Academy of Pediatrics, San Diego CA, April 1-4, 2000. A Celebration of Pediatric Pulmonology. Controversies in Sinusitis. The Vulnerable Infant – Bronchopulmonary Dysplasia.

American Thoracic Society/International Lung Conference, Toronto CA, May 6-9, 2000. New Perspectives in Aerosolized Antibiotics. Pediatric Clinical Chest Rounds, Case Discussant.

Johns Hopkins Medical Center. September 7, 2000. Allergic Bronchopulmonary Aspergillosis. Pulmonary Medicine Research Conference.

National Institutes of Health DNA Advisory Committee. September 26, 2000. Phase II Aerosolized Gene Therapy Protocol for Cystic Fibrosis. Public Hearing.

St Louis Cardinal Glennon Children's Hospital/St. Louis University. May 30, 2001. Fungal Complications of Cystic Fibrosis. Grand Rounds. Cytokines in cystic fibrosis. Allergy-Immunology Research Seminar.

Current Concepts in Pediatric Respiratory Disease: San Diego 2001. Children's Hospital San Diego. June 29-30, 2001. Bronchopulmonary Dysplasia: Does it Still Occur and How Should it be Managed?; Cystic Fibrosis: What we've Learned from the Infants and Should we Screen?

South American Congress of Pediatric Pulmonology. Florianopolis Brazil, October 1-5, 2001. Aerosolized Antibiotics.

Community Hospital of Los Gatos Grand Rounds. March 28, 2002. Cystic fibrosis.

Santa Clara Valley Medical Center Pediatric Grand Rounds. May 1, 2002. Cystic Fibrosis.

Respiratory Symposium. Central California Children's Hospital, Madera CA. September 26, 2002. Pathophysiology of Cystic Fibrosis.

North American CF Conference, October 4, 2002. CFF Consensus Conference Recommendations on Diagnosis and Treatment of ABPA.

3rd Anuual Irish Cystic Fibrosis Trust Meeting, Killarney, Ireland, February 8, 2003. Allergic Bronchopulmonary Aspergillosis.

Miami Children's Hospital 38th Annual Pediatric Postgraduate Course, January 27, 2003. Aerosolized Antibiotics in Treatment of Respiratory Infection in Children.

New York Cystic Fibrosis Consortium's Dinner Lecture, March 6, 2003. Treatment Emergent Pathogens: Aspergillus and S. Maltophilia.

UCSF Pulmonary Grand Rounds, San Francisco CA, May 6, 2003. Allergic Bronchopulmonary Aspergillosis.

American Society of Gene Therapy, Workshop on Respiratory Tract: Planning and Executing a Gene Therapy Trial for the Respiratory Tract, Washington DC, June 5, 2003. Aersol Grene Transfer in Cystic Fibrosis: The tgAAVCF Experience.

Postgraduate Institute for Medicine, Update on the Microbiology of Cystic Fibrosis (national teleconference), June 16-18, 2003. Treatment of Emerging Opportunists: Aspergillus.

CFRI Annual Conference, Redwood City CA, July 27, 2003. Gene Therapy Research: How Close are We?

Brazilian Cystic Fibrosis Assocation, Rio de Janeiro, Brazil, September 7-9, 2003. Gene Therapy; Inhalation Antiotics.

Cystic Fibrosis Foundation, North American CF Conference, October 19, 2003. *Plenary Speaker*, Progression of Cystic Fibrosis: Can We Gain the Upper Hand?

Lovelace Respiratory Research Institute, Santa Fe NM, October 14, 2003. New Pharmaceuticals: Inhalational Antibiotics for Airways Infection.

Spanish National Cystic Fibrosis Association, Oviedo, Spain, November 21-22, 2003. Clinical Research in Cystic Fibrosis; Inhalational Antibiotics.

Webcast (sponsored by Chiron and Dannemiller Memorial Education Foundation, June 9, 2004. Rationale and Evidence for Early Antibiotic Treatment of Cystic Fibrosis,

Advances Against Aspergillosis International Conference, San Francisco CA, Sept 9-11, 2004. Session Co-Chair, Immunity and Alergy to Aspergillus. Pathophysiology and Immunology of Allergic Aspergillosis.

Webcast (sponsored by Cystic Fibrosis Foundation), Sept 21, 2004. Going for the Gold in CF Care.

Cystic Fibrosis Gene Therapy (sponsored by Cystic Fibrosis Foundation), Sept 29-30, 2004. Status of AAV Clinical Trials.

Universidade Federal do Rio de Janeiro, Centro de Ciencas da Saude, Instituto de Biofisica Carlos Chagas Filho, November 26, 2004. Current Status of Inhalational Gene Transfer as a Treatment for Cystic Fibrosis.

Centro de Estudos Olinto de Oliveira, Instituto Fernandes Figueira, Rio de Janeiro, November 26, 2004. Center-Based Care for Cystic Fibrosis: Organization, Elements and Outcome.

Current Status of Early Treatment for CF Lung Infection. Sponsored by Chiron. Lectures at:
- Montreal Children's Hospital-McGill University, Montreal Canada, February 1, 2005
- Children’s Hospital-Dahousie University, Halifax Canada, February 2, 2005

•The Ottowa Hospital, Ottowa Canada, February 3, 2005
•Hospital for Sick Children, Toronto Canada, February 4, 2005

Cystic Fibrosis Quality Care for Quality Outcomes. Sponsored by Curatio CME Institute and Helix Medication Communications LLC. Lectures at:
•Children's Hospital, Columbus, February 5, 2005
•Children's Mercy Hospital, Kansas City MO, February 24, 2005
•Lackland Air Force Base, San Antonio TX, May 6, 2005
•Batchelor Children's Institute, University of Miami, Miami FL, July 14, 2005

Cystic Fibrosis. Spotlight Presentation, Independent Citizens' Oversight Committee, California Institute for Regenerative Medicine, Stanford CA, March 1, 2005

A Multicenter, Double-Blind, Placebo-Controlled, Phase II Study of Aerosolized tgAAVCF for the Treatment of Cystic Fibrosis, European Cystic Fibrosis Society, Annual Meeting, Hersonissos, Crete, Greece, June 23, 2005

Asthma New Ideas and Treatments. 13th Annual Pediatric Update. Lucile Packard Children's Hospital at Stanford, July 9, 2005

CF Lung Disease: Is There a Threshold for Intervention? Sponsored by MedPro Communications, Inc. Lectures at:
•University of Wisconson, Madison WI, Nov 10, 2005
•West Palm Beach FL, Jan 18, 2006
•Combined Medicine-Pediatrics Grand Rounds, University of Mississippi, Jackson MI, July 11, 2006
•Columbia University Presbyterian Babies Hospital, New York NY, Nov 30, 2006
•Baylor University Texas Children's Hospital, Houston TX, Dec 13, 2006
Winning the Struggle Against CF: What are the Tools? What are the Measures? California Thoracic Society, 2006 Annual Clinical Conference, Carmel CA February 4, 2006

Crtique of Trials in ABPA and Fungal Allergy. 2nd Advances Against Aspergillosis, Athens Greece, Feburary 23, 2006

Update on Cystic Fibrosis Clinical Research. American Thoracic Society American Thoracic Society 2006 International Conference, San Diego CA, May 21, 2006

Asthma, Recent Ideas and Treatment Advances. State University of New York Upstate Medical Center, Pediatric Grand Rounds, Syracuse NY, June20, 2006.

Inhaled Antibiotics for Airway Infection, Jilu Hospital, Shandong University, Jinan, China, Aug 26, 2006.

Practical Asthma – Achieving Success in a Variable Disease (with Gary Rachelefsky MD), Palo Alto CA, Dec 6, 2006.

Fungal Infection in Cystic Fibrosis. Physician's Grand Rounds Discussant, North American Cystic Fibrosis Conference, Anaheim CA, Oct 4, 2007.

Master Clinicians Present Optimizing Care Across a Lifetime: A Cystic Fibrosis TownMeeting™. Postgraduate Institute of Medicine CME Faculty. Six Webcasts, October 2007 – February 2008.
The New Horizon of Cystic Fibrosis in the Emerging Adult Population: An Interactive CME Experience. Medical Education Resources, Inc CME Chair and Faulty. Presentations in New York NY and Los Angeles CA October 2007 and two Webcasts October - December 2007.

Treatment of Early Pseudomonoas Aeruginosa Infection – When and How. Dannemiller Memorial Educational Foundation CME Faculty.
- •Albany NY, Nov 1, 2007
- •Salt Lake City UT, Nov 8, 2007
- •Los Angeles CA, Nov 9, 2007

Asthma Mini-Seminar. Popular Pediatric Clinical Topics – 2007. Lucile Packard Children's Hospital CME Course,Mauna Lani Bay HI, Nov 28-30, 2007.

Lymphoctes in Cystic Fibrosis. Workshop on Targeting Inflammation in Cystic Fibrosis. Novartis Institute for Biomedical Research, Horsham UK. March 2008.

Allergic Bronchopulmonary Aspergillosis in Cystic Fibrosis. Mountain West CF Consortium. Denver CO, April 18-19, 2008.

Glutathione and N-acetylcysteine in Cystic Fibrosis. Mountain West CF Consortium. Denver CO, April 18-19, 2008.

Improving Practices to Preserve Pulmonary Function, A Focus on *Pseudomonas aeruginosa*.
- •Fresno CA, May 23, 2008
- •Hollywood CA, June 26, 2008
- •Anaheim CA, July 31, 2008
- •Sacramento CA, August 15, 2008
- •Green Bay WI, September 3, 2008
- •Milwaukee WI, September 4, 2008
- •Boston MA, September 17, 2008
- •Children's Hospital, Philadelphia PA, September 18, 2008
- •Columbia Regional Hospital, Columbia MO, July 22, 2009
- •St. Louis MO, July 22, 2009
- •Webinar (University of Wisconsin), November 11, 2009
- •Webinar (Loyola University), December 2, 2009
- •Baltimore MD, October 21, 2010

Cystic Fibrosis: Are Clinical Signs and Symptoms a Starting Point or a Midpoint in Lung Disease?
- •Burlingame CA, September 10, 2008
- •Webcasts, October 1, October 8, 2008
- •Pasadena CA, November 6, 2008
- •New York NY, November 13, 2008
- •Houston TX, December 4, 2008

•Santa Ana CA, January 14, 2009
•Fort Worth TX, February 20, 2009

Cystic Fibrosis – Adult Issues. Department of Medicine, UCSF – Fresno campus, Fresno CA, November 20, 2008

Pediatric Fungal Lung Disease. Grand Rounds, Children's Hospital of Central California, Madera CA, November 20, 2008

Lymphocytes in Cystic Fibrosis: Actors or Voyeurs? Physiology Grand Round, Johns Hopkins School of Medicine, Baltimore MD, December 12, 2008

Childhood asthma. East Bay Asthma Coalition Educational Forum. Oakland CA, April 2009.

Preserving Lung Function in Cystic Fibrosis; Allergic Bronchopulmonary Aspergillosis in Cystic Fibosis. Canadian CF Center lectures:
University of Calgary, May 6 2009
Montreal, May 7, 2009
University of Alberta, Edmonton, May 8, 2009
Toronto (Hospital for Sick Children and St. Michael's Hospital), September 10, 2009

Phase 3 study of denufosol for cystic fibrosis. American Thoracic Society annual meeting, San Diego CA, May 17, 2009.

Childhood asthma. Pediatric Grand Rounds, Community Hospital of Monterey Peninsula, Monterey CA, June 9, 2009.

Atopy in Asthma: Making the Pieces Fit in Clinical Practice. Postgraduate Institute of Medicine/Respiratory & Allergic Disease Foundation CME Teleconference (with Richard J. Martin MD), June 17, 2009.

Inflammation Overview. GlaxoSmithKline CF2110399 Trial Investigators' Meeting, Chicago IL, June 25, 2009.

Achieving Asthma Control: What the 2007 NIH Guidelines Say. Lucile Packard Children's Hospital 17th Annual Pediatric Update, July 17, 2009.

Childhood Asthma: Control and Beyond. United Arab Emirates:
Abu Dhabi, October 1, 2009
Al Ain, October 2, 2009
Dubai, October 3, 2009

Ahead of the Curve: Emerging CF Therapies. Symposium speaker: Overview of Pathophysiologic Targets, North American Cystic Fibrosis Conference, Minneapolis MN, October 16, 2009

Practicalities of Management in Allergic Bronchopulmonary Aspergillosis. North American Cystic Fibrosis Conference, Symposium on Allergy and Asthma in CF (Session Chair), Minneapolis MN, October 17, 2009

New Treatments for Asthma: Anti-IgE and Allergy Shots. Salinas Valley Memorial Hospital pediatric grand rounds, Salinas CA, November 20, 2009

Cystic Fibrosis Lung Disease: Rethinking the At-Risk Patient.
Albany NY, November 12, 2009
Children's Hospital Los Angeles, CA, January 15, 2010

Invited Medical School Teaching Tour of Brazil August-September 2010

São Paulo

•Faculdade de Ciências Médicas da Santa Casa de São Paulo, Santa Casa Hospital. Dr. Luiz Arnaldo Szutan MD PhD, Director, Medical School; Dra. Maria Lucia Bastos Passarell MD PhD, Director, Dept Pediatrics; Dra. Neiva Damasceno, Director Pediatric Pulmonology.

•Universidade Federal de São Paulo (UNIFESP). Dra. Sonia Mayumi Chiba, Director CF Clinic, Prof. Dr. Clovis Eduardo Tadeu Gomes, Chief of Pediatric Pulmonology, Prof. Dr. Mauro Batista de Morais, Chief of Pediatrics.

•Instituto da Criança, Hospital das Clínicas – Medical School of University of São Paulo (FMUSP). Fabiola Villac Adde, MD PhD, Pulmonary Division.

Campinas

•Department of Pediatrics, Dr. Antonio Fernando Ribeiro, Director. FCM da Universidade Estadual de Campinas (UNICAMP)

Rio de Janeiro

•Hospital Universitário Antonio Pedro, Universidade Federal Fluminense (UFF), Niterói. Prof. Beatriz Guitton Renaud B. Oliveira, Professor Titular, Federal Fluminense University School of Nursing, Clinical Research Unit, Course Coordinator.

•Hospital Universitário Pedro Ernesto, Faculdade de Ciências Médicas, Universidade do Estado do Rio de Janeiro Centro Biomédico (FCM-UERJ). Prof. Plinio José da Rocha, Dean of Faculty.

•Fernandes Figueira Institute (IFF), Oswaldo Cruz Foundation (FIOCRUZ), Zilton Vasconcelos, Pesquisador em Saúde Adjunto, Laboratório de Fisiopatologia Human.

•Universidade Federal do Rio de Janeiro (UFRJ), Faculdade de Medicina, Programa de Pós-Graduação em Clínica Médica, Clementino Fraga Filho University Hospital, Prof. José Roberto Lapa e Silva, Prof. Pulmonology and Coordinator, UFRJ Graduate Program in Clinical Medicine.

•Oswaldo Cruz Institute (FIOCRUZ) I Simpósio IOC de Fibrose Cística. Giselda M Kalil Cabello PhD, Director, Laboratório de Genética Humana - IOC - Fiocruz.; Daniel Gibaldi, Vinícius Cotta-de-Almeida, Science Committee.

Salvador, Bahia

•Universidade Federal da Bahia (UFBA), Faculdade de Medicina da Bahia, Hospital Especializado Octavio Mangabeira, Dr. Antonio Carlos Moreira Lemos, Chefe do Serviço de Pneumologia.

Belo Horizonte, Minas Gerais

•III Congresso Brasileiro de Fibrose Cistica (1-4 Sept)
Dr. Francisco José-Caldeira Reis, President;
Dra. Neiva Damacena, President, Grupo Brasileiro de Estudos da Fibrose Cistica

•Universidade Federal de Minas Gerais (UFMG), Faculdade de Medicina, Prof. Francisco José Penna, Dean.
Porto Alegre
•Universidade Federal do Rio Grande do Sul (UFRGS)
Santa Casa - Complexo Hospitalar

New Guidelines for the Diagnosis and Treatment of Asthma, Dameron Hospital Association, Stockton CA, May 20, 2011.

Exposure to Aeroallergens, Symposium on the CF Lung and the Environment, 34th European Cystic Fibrosis Conference, Hamburg Germany, June 10, 2011.

Do's and Don't's in the Management of ABPA, Workshop on Immunological Reactions to Fungal Micro-Organisms, 34th European Cystic Fibrosis Conference, Hamburg Germany, June 10, 2011.

ABPA and Nontuberculous Mycobacterial Infection, Physicians Grand Rounds discussant, North American Cystic Fibrosis Conference, Anahaim CA, Nov 3, 2011.

Lessons Learned from the Denufosol Trials. North American Cystic Fibrosis Conference, Anahaim CA, Nov 5, 2011.

Allergic Bronchopulmonary Aspergillosis, Symposium on Fungal Infections, 35th European Cystic Fibrosis Conference, Dublin Ireland, June 9, 2012.

Allergen Sensitization in Allergic Bronchopulmonary Aspergillosis, Plenary Session on Allergy, 18th Congress of the International Society for Human and Animal Mycology, Berlin, June 15, 2012.

Fungal Infection, Allergy and Lung Disease, Pediatric Grand Rounds, Lucile Packard Children's Hospital, Stanford University Medical Center, June 29, 2012.

Chronic Lung Disease of Infancy, American Lung Association of Nevada, Las Vegas, September 13, 2012.

Adult and Chilhood Asthma, SEIU UHW-West & Joint Employer Education Conference, Santa Clara CA, October 5, 2012.

APBA Roundtable, North American Cystic Fibrosis Conference, Orlando FL, October 13, 2012.

Early Intervention in Cystic Fibrosis, Johns Hopkins University CME, North American Cystic Fibrosis Conference, Orlando FL, October 11, 2012.

New and Emerging Treatment for Cystic Fibrosis. Rush University CME.
Spokane WA, November 1, 2012.
Johns Hopkins Hospital, Baltimore MD, December 10, 2012.

Evidence-Based Therapies in Cystic Fibrosis: Defining the Goals. Rush University CME Omaha NB, November 8, 2012.

Aspergillus in CF – what can we learn from other lung diseases? European CF Conference, Lisbon Portugal, June 14, 2013.

Basophil activation is a reliable biomarker of allergic bronchopulmonary aspergillosis (ABPA) in CF: interim results of a longitudinal cohort study. European CF Conference, Lisbon Portugal, June 14, 2013.

TRAINEES IN ALLERGY-IMMUNOLOGY AND/OR PEDIATRIC PULMONOLOGY (ALLERGY-IMMUNOLOGY TRAINING PROGRAM DIRECTOR 1989-1995, 2005-PRESENT)

Name	Current Employment & Location/Certification	Dates of Training
Steven Machtinger MD	Clinical allergy practice San Mateo Clinical faculty, Stanford ABAI 1983	1981-3
Russell Leong MD	Clinical allergy practice San Francisco	1981-3
Elide Pastorello MD	Professor, Allergy University of Milan	1982-3 (Visiting Scholar, lab research)
Mitchell Seleznick MD	Faculty, allergy-immunology Dept Medicine University of South Florida Tampa, Florida ABAI 1985	1982-4
Robert Hindi MD	Clinical allergy practice Oakland ABAI 1986	1983-4 (1st yr @ UCSF
Steven Rubinstein MD	Clinical allergy Sunnyvale Medical Clinic Clinical faculty, Stanford ABAI 1985	1983-5
Vivian Saper MD	Clinical faculty, Stanford ABAI 1987	1985-6 (1st yr @ UCSF
Margaret Sullivan MD	Pediatric pulmonology St. Vincent's Hospital New York, NY ABPedPulm 1992	1985-6 (2nd yr @ St. Vincent's Hosp)
Irmgard Eichler MD	Pediatric pulmonology University of Vienna Associate Professor UMEA, London, 2008-	1986-7 (Visiting Scholar, lab research)
Mohan Dhillon MD	Faculty, allergy-immunology Dept Medicine University of Manitoba	1987-9

	Winnipeg, Canada ABAI 1989	
Mark Schubert MD, PhD	Clinical allergy practice Clinical faculty Univ Ariz Phoenix, Arizona ABAI 1989	1987-9
John Van Wye MD	Clinical allergy practice Ashville, North Carolina ABAI 1991	1988-90
Jeffrey Davidson MD	Clinical allergy practice San Francisco ABAI 1991	1989-91
Theodore Guarino MD	Pediatric neurologist Los Gatos CA	1989-90 (switched to neurology fellowship)
Liesbet Joris-Quinton MD	Division Head Hospital Medicine, Scripps La Jolla CA	1989-90 (Visiting Scholar, lab research)
Robert Bocian MD PhD	Clinical faculty, Stanford Palo Alto Medical Foundation ABAI 1993	1990-2
Carrie Loutit MD	Staff Physician (CE) Division of General Pediatrics Stanford	1990-2
Syed M. Maseehur Rehman MD	Clinical allergy practice Toledo OH ABAI 1993	1990-2
Mary Ann Carmack MD	Clinical infectious disease Palo Alto Medical Foundation	1991 (peds ID fellow, lab research)
Kevin Schaffer MD	Clinical allergy practice Atlanta, GA ABAI 1993	1991-3
Mariska S. Kemna MD	Staff Physician (CE) Pediatric Cardiology Stanford	1991-3 (Visiting Scholar, lab research)
Steven Gold MD	Clinical allergy practice Brooklyn NY	1991-3

Luis Antonio Gonzalez MD	Clinical allergy practice El Paso TX	1992-5
Amy Oro MD	Pediatric Practice Los Altos CA ABAI 1995	1993-5
Terry Robinson MD	Asst Professor (pulm), Stanford ABPedPulm	1993-6
Peter Maguire MD	Clinical allergy practice Palo Alto Medical Foundation ABAI	1994-6
Grace Tamesis MD	Medical Staff National Jewish Hospital & Research Center Denver CO	1995-6 (switched to (PHS fellowship)
Shuba Iyengar MD	Clinical Instructor Massachusetts General Hospital, Boston MA	2005-6 (2nd yr at Harvard)
Pauline Fani MD	Clinical allergy practice Roslyn NY	2006-7 (1st 2 yrs at Columbia Univ)
Jennifer M. Klein MD	Allergist Kaiser Hayward CA	2006-8
Jennifer E. Yoo MD	Allergist Santa Clara Valley Med Center Santa Jose CA	2006-8
Steve J. Song MD	Allergist San Jose, CA	2006-9
Laurence Cheng MD PhD	Instructor, Allergy-Immunology University of California San Francisco	2006-9
Grace P Yu MD	Allergist Menlo Medical Clinic Menlo Park, CA	2007-10
Katherine Fast MD	Allergist San Mateo, CA	2007-10

Neha Reshamwala MD	Allergist Austin, TX	2008-10
Katharine Nelson MD	Research Fellow, Stanford	2009-11
Jose Demetrius Hernandez MD PhD	Fellow	2010-13

SELECTED ABSTRACTS

Lewiston NJ, Moss RB. Prolonged corticosteroid therapy in cystic fibrosis. *CF Club Abstr* 22:131, 1981.

Moss RB, Hsu YP. IgM and IgG rheumatoid factors in cystic fibrosis compared to rheumatic diseases of childhood and controls. *Clin Res* 30:96A, 1982.

Moss RB, Hsu YP. Autoimmunity in cystic fibrosis: evidence against polyclonal B cell activation. *J Allergy Clin Immunol* 69:S112, 1982.

Lewiston NJ, Moss RB. Circulating immune complexes decrease during corticosteroid therapy in cystic fibrosis. *Pediatr Res* 16:345A, 1982.

Moss RB, Hsu YP, Leahy M, Halpern G. IgG_4 antibodies to Pseudomonas aeruginosa in cystic fibrosis. *CF Club Abstr* 23:13, 1982.

Leong RE, Moss RB, Blessing J, Cheung NKV, Cheung I, Lewiston NJ. IgE and IgG antibodies to casein in suspected cow's milk allergy. *Ann Allergy* 50:352, 1983.

Moss RB, Hsu YP. Humoral immune response to inhaled and parenteral allergens: role of IgG_4 antibody in clinical protection. *J Allergy Clin Immunol* 73:138, 1984.

Moss RB, Hsu YP, Kwasnicki M, Reid MJ. A quantitative immunoenzymatic assay for allergen-specific IgE antibodies. Comparison with three other in vitro assays. *Clin Res* 32:41A, 1984.

Kwasnicki JM, Moss RB, Cheung NKV, Reid MJ. Towards a quantitative enzyme-linked immunosorbent assay for specific IgE. *J Allergy Clin Immunol* 73:152, 1984.

Blessing J, Leong RE, Machtinger S, Lewiston N, Moss RB. Once a day theophylline in asthmatic adolescents. *Clin Res* 32:61A, 1984.

Blessing J, Leong RE, Machtinger S, Lewiston N, Moss RB, Rubinstein S, Hindi R. Once daily theophylline (Uniphyl) for treatment of bronchospasm in patients with cystic fibrosis and asthma. *Ann Allergy* 52:235, 1984.

Moss RB, Hsu YP. A quantitative immunoenzymatic assay for grass pollen-specific IgG antibodies. *J Allergy Clin Immunol* 75:175, 1985.

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