

Antine Elaine Stenbit, M.D. PhD.

Office Number (864)454-4200
astenbit@ghs.org

200 Patewood Dr, Bld B Suite 300
Greenville, SC 29615

Education: M.D./Ph.D. (Biochemistry with honors) 1998
Albert Einstein College of Medicine, NY
B.S. (Biology and Psychology) 1991
Carnegie Mellon University, PA

Professional Training: *Department of Medicine, University of California San Diego*
Pulmonary and Critical Care Fellow 2000-2004
Post-doctoral Fellow- Kirk Knowlton, MD 2001-2006
Research Residency Program 1998-2004

Medical University of South Carolina
Lean Six Sigma Physician Training 2010

Experience: **Associate Professor of Clinical Medicine-** University of South Carolina-School of Medicine, Greenville 2014-present
Division of Pulmonary and Critical Care- Greenville Health System 2014-present
Pulmonary Hypertension Clinic Director- Greenville Health System 2014-present
Medical Director- Medical Surgical ICU- Greenville Health System 2014-present
Introduction to Physical Medicine- Skills Instructor 2017- present

Assistant Professor of Medicine 2006-2014
Joint Appointment Divisions of Pulmonary, Critical and Allergy and
Department of Cell Biology and Anatomy, Medical University of South Carolina
-Associate Director of the Adult Cystic Fibrosis Program (2006-13)
-Medical Director of Medicine/Surgery Ward (2007-13)
-Director of Non-ICU vented patients (2009-13)
-IRB (2011-current)
-Clinical Teaching of Medical Students, Medical Residents and Pulmonary and Critical Care
Fellows on pulmonary ward service, consult service, cystic fibrosis clinic and ICU
-Medical School
*Co-Director Physical Diagnosis PGY 1-4 (2012-2014)
*Course instructor for PGY1/2 in Physical Diagnosis (2012-2014)
*Fundamentals of Patient Care instructor (2012-2014)
*Clinical Reasoning Instructor (2013-2014)
*Physical Diagnosis Preceptor (2006-2014)
*Intraprofessional Course Instructor (2013-2014)
*Professor Rounds- PGY3 (2006-2014)
*Planning and Evaluation Committee Year 1 and 2 (2012-2014)
*Selective and Electives Committee (2012-2014)
*Department of Medicine- Medical Student Education Committee (2011-2014)
*Medical education leader Division of PCC (2011-2014)
*Candidate Interviewer (2010-2014)
-Residency Program

*Candidate Interviewer (2007-2014)

Clinical Instructor- Pulmonary and Critical Care, University of California San Diego (2004-2006)

-Co-director Adult Cystic Fibrosis Clinic

-Clinical Teaching of Medical Students, Medical Residents and Pulmonary and Critical Care Fellows on consult service, cystic fibrosis clinic and MICU

- Introduction to Clinical Medicine, Pulmonary Section

Additional Service:

Vice Chairman, Respiratory Care Committee, Board of Medical Examiners, SC (2006-8)

Respiratory Care Committee, Board of Medical Examiners, South Carolina (2006-2010)

Director of Sweat Chloride Testing (2006-2010)

Cystic Fibrosis Foundation

*Quality Improvement Program- Learning and Leadership Collaborative-V-2007

*Protocol Review Committee-Therapeutic Development Network (2005-2006, 2010-13).

*Quality Improvement Leader- CF center MUSC (2011-2013)

Academy of Medical Educators- Membership Committee (2013-2014)

American Association of Medical Colleges- DOCs membership committee (2013-2014)

American Thoracic Society

*Medical Education Working Group (2013-current)

Physician Champion Schwartz Center (2010-2014)

Schwartz Center Planning Committee (2009-2014)

Department of Medicine Research Day Judge (2007-2014)

Research Committee- Pulmonary Division (2009-2014)

ICU Transfer Communications Task Force (2008-2012)

Blood Stream Infection Task Force (2010-2013)

Basic Science Operations- Department of Medicine

IMPROVE project for COPD readmission, admission and discharge committee(2010-13)

ICU transfer committee-GHS (2016-current)

ICU QA Committee- GHS (2014-current)

ICU medical Directors committee- GHS (2014-current)

Executive Committee- Academic liaison (2017- current)

Board

Certification:

Critical Care Medicine 2005/2015/2025

Pulmonary Diseases 2003/2013/2023

Internal Medicine 2001/2011/2021

Honors

Fellow American College of Chest Physicians- 2014 -current

And

Master Teacher of the Academy of Medical Educators-2014

Awards:

Fellow of the Academy of Medical Educators-2012

MUSC Foundation Teaching Excellence Award Nominee-2011/2013/2014

House staff Teaching Award Nominee-2006/2008/2009

Golden Apple Nominee-2006, 2010, 2013

Alpha Omega Alpha

Licenses:

South Carolina Medical License-active

South Carolina DHEC License- active

DEA License- active
California License- not currently active

Ad Hoc Reviewer: American Journal of the Medical Sciences
Respiratory Medicine
Journal of Cystic Fibrosis
European Respiratory Journal
GHS Proceedings

References: **Dr. Lawrence C. Mohr**
Dr. Douglas J. Conrad
Dr. Donna H. Kern

Clinical Trials, Publications, and Presentations Attached.

Publications:

1. Manolson, M.F., D. Proteau, R.A. Preston, **A. Stenbit**, B.T. Roberts, M.A. Hoyt, D. Preuss, J. Mulholland, D. Botstein, and E.W. Jones. 1992. The VPH1 gene encodes a 95- kDa integral membrane polypeptide required for the in vivo assembly and activity of the yeast vacuolar H⁺- ATPase. *J. Biol. Chem.* 267:14294-303.
2. **Stenbit, A.** 1993. Lysosomal associated membrane proteins LAMP-1 and LAMP-2. *Einstein Quarterly* 10:128-132.
3. Katz, E.B.*, **A.E.Stenbit***, K. Hatton, R. DePinho and M.J.Charron. 1995. Cardiac and adipose tissue abnormalities but not diabetes in GLUT4 deficient mice. *Nature* 377:151-155.
4. **Stenbit, A.E.**, R. Burcelin, E.B. Katz, T.S. Tsao, N. Gautier, M.J. Charron and Y. Le Marchand-Brustel. 1996. Activation of a novel glucose transport system in muscles deficient in GLUT4. *J. Clin. Invest.* 98:629-634.
5. Katz, E.B., R. Buerclin, T.S. Tsao, **A.E. Stenbit**, and M.J. Charron. 1996. The metabolic consequences of altered glucose transporter expression in transgenic mice. *J. Mol. Med.* 74:639-652.
6. McCall, A.L., A. van Bueren, L. Haung, **A. Stenbit**, E. Celnick and M.J. Charron. 1997. Brain endothelium expresses insulin-regulatable glucose transporters. *Brain Reseach* 744:318-326.
7. **Stenbit, A.E.**, T.S. Tsao, E.B. Katz, D. Geenan, R. Burcelin, F.C. Brosius, S.M. Factor and M.J. Charron. GLUT4 heterozygous knockout mice develop muscle insulin resistance and diabetes. *Nature Medicine* 3: 1096-1101.
8. Tsao, T.S., **A.E. Stenbit**, J.Li, K.L. Houseknecht, J.R. Zierath, E.B. Katz, and M.J. Charron. 1997. Muscle-specific transgenic complementation of GLUT4-deficient mice: Effects on glucose but not lipid metabolism. *J. Clin. Invest.* 100:671-677.
9. Rossetti, L., **A.E. Stenbit**, L. Cheng, N. Barzali, E.B. Katz and M.J. Charron. (1997) Insulin resistance and altered glucose homeostasis in GLUT4 heterozygous knockout mice. *J. Clin. Invest.* 100:1831-1839.
10. Zierath, J.R., T.S. Tsao, **A.E. Stenbit**, J. Ryder, D. Galuska, and M.J. Charron. (1998) Restoration of hypoxia- stimulated glucose uptake in GLUT4-deficient muscles by muscle-specific GLUT4 transgenic complementation. *J. Biol. Chem.* 273:20910-20915.
11. Ryder, J.W., Y. Kawano, J. Rincon, T.S. Tsao, **A.E.Stenbit**, G.D. Holman, M.J. Charron, and J.R. Zierath. 1999. Biochemical characterization of a novel insulin-sensitive glucose transport system in GLUT4- null muscle. *Biochemical J.* 342:321-328.
12. Tsao,T.S., **A.E. Stenbit**, S.M. Factor, W. Chen, L. Rossetti, and M.J. Charron. 1999. Prevention of insulin resistance and diabetes in mice heterozygous for Glut4 ablation by transgenic complementation of Glut4 in skeletal muscle. *Diabetes* 48:775-782.

13. **Stenbit, A.E.**, E.B. Katz, J.C. Chatham, D.L. Geenen, S.M. Factor, R.G. Weiss, T.S. Tsao, A. Malhotra, V.P. Checko, C. Ocampo, L. Jelicks, and M.J. Charron. 2000. GLUT4 null hearts preserve glucose metabolism and resist loss of function after ischemia. *Am. J. Physiol. Heart Circ. Physiol.* 279:H313-318.
14. Li, J., K.L. Houseknecht, **A.E. Stenbit**, E.B. Katz, and M.J. Charron. 2000. Reduced glucose uptake precedes insulin signaling defects in adipocytes from heterozygous GLUT4 knockout mice. *FASEB J.* 14:1117-1125.
15. Tsao, T.S., J. Li, **A.E. Stenbit**, D. Galuska, J.E. Anderson, J.R. Zierath, and M.J. Charron. Metabolic adaptations in skeletal muscle overexpressing GLUT4: effects on muscle and physical activity *Faseb J* 15:958-96.
16. Ranaletta, M, H. Jiang, J. Li, T.S. Tsao, **A.E. Stenbit**, M. Yokoyama, E.B. Katz, and M.J. Charron. 2005 Altered hepatic and muscle substrate utilization provoked by GLUT4 ablation. *Diabetes.* Apr;54(4):935-43
17. F. Sheikh, Y. Chen, X. Liang, A. Hirschy, **A.E. Stenbit**, Y. Gu, N.D. Dalton, T. Yajima, Y. Lu, K.U. Knowlton, K.L. Peterson, J.C. Perriard, and J. Chen (2006) a-E catenin Inactivation Disrupts the Cardiomyocyte Adherens Junction Resulting in Cardiomyopathy and Susceptibility to Wall Rupture. *Circulation.* 114(10):1046-55.
18. Saucerman, J J, J Zhang, **A. E. Stenbit**, R. Y. Tsien, A.D. McCulloch (2006). Systems analysis of PKA-mediated phosphorylation gradients in live cardiac myocytes. *PNAS* 103(34):12923-8.
19. Belke, D.D., E.A. Swanson, B. Scott, A. E. Stenbit, W.H. Dillman (2006). Increased Expression of SERCA in the hearts of transgenic mice results in increased oxidation of glucose. *Am J Physiol Heart Circ Physiol* 292(4):H1755-63.
20. Xiong, D., H. Duplain, T. Yajima, **A. Stenbit**, D. Summers-Torres, T. Nguyen, L. Rizk, K.U. Knowlton (2007). Inducible cardiac restricted expression of enteroviral protease 2A is sufficient to cause dilated cardiomyopathy with disruption of dystrophin. *Circulation.* 115(1):94-102.
21. Ranaletta, M, X. Du, Y. Seki, A.S. Glenn, M. Kruse, A. Fiallo, I. Estrada, T.S. Tsao, **A. Stenbit**, E. Katz, and M.J. Charron. 2007 Hepatic response to restoration of GLUT4 in skeletal muscle of GLUT4 null mice. *Am. J. Physiol. Endocrinol. Metab.* 293(5):E1178-87.
22. Conrad, DJ, **A.E. Stenbit**, E.M. Zettner, I. Wick, C. Eckhardt and G. Hardiman 2008. Frequency of mitochondrial 12S ribosomal RNA variants in an adult cystic fibrosis population. *Pharmacogenetics and Genomics.* 18(12):1095-102.
23. Gore, A.P, S.H. Kwon, and **A.E. Stenbit** 2010. A roadmap to the brittle bones of cystic fibrosis. *J. Osteoporosis,* 926045
24. Bell, PD, W. Fitzgibbon, K. Sas, **A. Stenbit**, M. Amira, A. Houston, R. Reichert, S. Gilley, G. Siegal, J. Bissler, M. Bilgen, P. Chou, L. Guay-Woodford, B. Yoder, C. Haycraft, and B. Siroky, 2011. Interactions between Cilia, hypertrophic signaling and renal cystogenesis. *J Am Soc. Nephrol.* 22(5):839-48.
25. Tomov, SV, Flume P.A, **A.E. Stenbit**, and M.E. Ullian. 2011. Prerenal azotemia from excessive sweating in an adult with a cystic fibrosis gene mutation. *Indian J Nephrol.* 21(3):194-7
26. **Stenbit, A.E**, W.M. Bullington, J.L. Heh and P.A. Flume, 2012. Timing of inhaled tobramycin tobramycin affects assessment of intravenous tobramycin pharmacokinetic monitoring. *J. Cys Fib.* <http://dx.doi.org/10.1016/j.jcf.2012.11.007>.
27. Gilley SK, **AE Stenbit**, RC Pasek, KM Sas, SL Steele, M Amria, MA Bunni, KP Estell, LM Schwiebert, P Flume, M Gooz, CJ Haycraft, BK Yoder, C Miller, JA Pavlik, GA Turner, JH Sisson, PD Bell 2014. Deletion of airway cilia results in noninflammatory bronchiectasis and hyperreactive airways. *Am J Physiol Lung Cell Mol Physiol.* 306(2):L162-9.
28. Sanchez, R. and A.E. Stenbit (2014). Management of Pulmonary Exacerbations and Complications in Adults with Cystic Fibrosis. *Hospital Physician* 14(6):1-15.
29. Bade, B. C., M.G. Janech, J.G. Ravenel, and A. E. Stenbit. (2015). Bronchobiliary Fistula presenting with recurrent pneumonia and cholelithoptysis. *Am J Med Sci.* 2015 Jul;350(1):72-3.

30. Loberger, J, A.E. Stenbit, B. Knight (2016). Fatal Propofol Infusion Syndrome in a Young Adult in Status Epileptics. *The Journal of the SC Med Assoc* Dec 2016/Jan2 017;112(4):280

*denotes co-authors, each author contributed equally to this work

Articles (invited/non-peer reviewed)

1. Chauvin, J. and **A.E. Stenbit** (2007). Making Progress: Ongoing studies suggest a promising future for ARDS treatment, *Advance for managers of respiratory care* 16(6):44-47.
2. Flume P.A. and **A. Stenbit** (2008). Making the diagnosis of cystic fibrosis. *Am J Med Sci.* 335(1):51-54.
3. **Stenbit, A.** and PA Flume (2008). Pulmonary complications in adult patients with cystic fibrosis. *Am J Med Sci.* 335(1):55-59.
4. **Stenbit, A.E** and P.A. Flume. 2011. Pulmonary Exacerbation in cystic fibrosis. *Curr Opin Pulm Med* 2011 Nov;17(6):442-7.

Abstracts/Posters/Meeting Presentations:

1. Charron, M.J., E.B. Katz, **A.E. Stenbit**, and T.S. Tsao. Targeted disruption of the GLUT locus in mice: developmental consequences. Canadian Federation of Biological Societies meeting, Canada (1994).
2. **Stenbit, A.E.**, E.B. Katz, R. Burcelin and M.J. Charron. Generation of GLUT4 null mice using WW6 embryonic stem cells. Shering-Plough invited presentation (1995).
3. **Stenbit, A.E.**, E.B. Katz, R. Burcelin and M.J. Charron. Generation of GLUT4 null mice using WW6 embryonic stem cells. American Diabetes Association meeting, Atlanta, Georgia (1995).
4. **Stenbit, A.E.**, E.B. Katz, R. Burcelin and M.J. Charron. Genetic ablation of GLUT4 results in decreased longevity, cardiac and adipose tissue abnormalities but not diabetes. FASEB Glucose Transporter Biology meeting. Snowmass, Colorado (1995).
5. Rossetti, L., **A.E. Stenbit**, E.B. Katz, N. Barzilai, W. Chen, M. Hu and M.J. Charron. Disruption of one allele of the murine GLUT4 gene causes marked resistance to the action of insulin. *Biomedicine* (May 1996).
6. Tsao, T.S., **A.E. Stenbit**, E.B. Katz, R. Burcelin, Y. Le Marchand-Brustel and M.J. Charron. Genetic complementation of GLUT4 specifically in skeletal muscle of GLUT4-null mice. American Diabetes Association (June 1996).
7. Brosius, F.C. III, **A.E. Stenbit**, C. Heilig, P. Killen, Z. Lin, K. Nguyen and E.B. Katz. GLUT4 (+/-) mice: A new model of diabetic nephropathy. American Diabetes Association (June 1996).
8. **Stenbit, A. E.**, T.S. Tsao, E. B. Katz, F.C. Brosius III, S.M. Factor and M.J. Charron. Transgenic complementation of the diabetic phenotype of GLUT4 heterozygote knockout mice. American Diabetes Association (June 1996).
9. Katz, E.B, **A.E. Stenbit**, J.Li, T.S. Tsao, K.L. Houseknecht, and M.J. Charron. Effect of decreased GLUT4 in adipocytes of male heterozygote GLUT4 knockout mice on insulin action. *The Adipose Cell*, Keystone Symposia, Park City, Utah (1997).
10. Charron, M.J., J.Li, T.S. Tsao, R. Burcelin, **A.E. Stenbit**, K.L. Houseknecht, J.R. Zierath, and E.B. Katz. Alterations in glucose transport in GLUT4 knockout mice. *Insulin Action and Secretion in NIDDM*, Keystone Symposia, Park City, Utah (1997).
11. Li, J., T.S. Tsao, R. Burcelin, **A.E. Stenbit**, E.B. Katz, J.R. Zierath, and M.J. Charron. Evidence for the existence of an insulin-sensitive glucose transport system which accounts for the absence of

- diabetes in GLUT4 null mice. *Insulin Action and Secretion in NIDDM*, Keystone Symposia, Park City, Utah (1997).
12. Duplain, H., **Stenbit, A. E.**, Xiong, D., Yajima, T. and Knowlton, K. (2003). Adeno-associated virus-mediated eNOS expression in the heart increases cellular damage during coxsackievirus infection through a peroxynitrite dependent mechanism. *Circulation* **108(17)**:20 Suppl. S.
 13. **Stenbit, A.E.**, H. Duplain, D.D. Belke, J.M. Hollander, D. Xiong, D. Summers-Torres, S.C. Froehner, M.E. Adams, and K. U. Knowlton (2004). nNOS is primarily localized to the sarcoplasmic reticulum in cardiac myocytes and dependent on α -syntrophin. American Heart Association Meeting, New Orleans 2004
 14. Xiong, D., T. Yajima, **A. Stenbit**, D. Summers-Torres, T. Nguyen, L. Rizk, K.U. Knowlton. Inducible cardiac restricted expression of enteroviral protease 2A is sufficient to cause dilated cardiomyopathy with disruption of dystrophin. American Heart Association Meeting, New Orleans 2004
 15. Rose, RM, AE Stenbit, JJ Marsh, D Summers-Torres, KU Knowlton, RG Spragg and MP Bruchez (2005). Quantum dot imaging of transplanted stem cells in the lungs. Adult Stem Cells, Lung Biology, and Lung Disease Workshop, Burlington, VT
 16. Saucerman, J J, J Zhang, **A.E. Stenbit**, R. Y. Tsien, A.D. McCulloch(2006). Systems analysis of PKA-mediated phosphorylation gradients in live cardiac myocytes. Cell Biology meeting
 17. Wray, CJ and **Stenbit AE** (2006). Use of Omelizumab for cessation of corticosteroid therapy a patient with pulmonary sarcoidosis, aspergillomas, long-standing asthma and allergic bronchopulmonary aspergillosis. *J Investig Med*; 54:S164. Abstract #494. Carmel by the Sea, California.
 18. Conrad, D J, G Hardiman, E Zettner, and **A E Stenbit** (2007). Frequency of Mitochondrial 12S Ribosomal RNA Polymorphisms Associated with Aminoglycoside Ototoxicity in an Adult CF Patient Population NACF, Anaheim, CA.
 19. Lester, M, C Kerrigan, S Gray, A Jones, S Bishop, C Bannister, K Crady, I Virella-Lowell, M Bowman, **AE Stenbit**, and P Flume (2007). The Process of Improving the Quality of Cystic Fibrosis Care at MUSC. NACF, Anaheim, CA.
 20. Virella-Lowell, I. K. Crady, P.A. Flume, **A. Stenbit**, C. Kerrigan, Keegan, N. S. Gray, J. Webb. (2010) Improving nutrition status with nutrition risk score sheet. NACF, Baltimore, MD
 21. **Stenbit, A.E** and P.A. Flume (2010). Routine Preventive Health Maintenance in the US adult Cystic Fibrosis Population. NACF, Baltimore, MD.
 22. **Stenbit, A.E.**, W.M. Bullington, J.H. Heh, and P.A. Flume (2011). Timing of inhaled tobramycin affects intravenous tobramycin trough levels. 34th ECFS Conference, Hamburg, Germany
 23. **Stenbit, A.E.**, M.Y Amria, S.K. Gilley, C. Atkinson, and P.D. Bell. (2011). Lack of Polaris in Mice Leads to Ciliary Loss and Bronchiectasis Not Due to Primary Infection. ATS Conference, Denver, CO.
 24. **Stenbit, A.E.**, W.M. Bullington, J.H. Heh, and P.A. Flume (2011). Inhaled Tobramycin Timing Alters Intravenous Tobramycin Concentrations. 25th NACFC Conference, Anaheim, CA
 25. Grench, K., K. Crady, I. Virella-Lowell, **A.E. Stenbit**, P.A. Flume, C. Kerrigan, N. Keegan, S. Gray, and J. Webb. (2011). Using Education To Improve Nutritional Outcomes In CF. 25th NACFC Conference, Anaheim, CA
 26. **Stenbit, A.E** (2011) Inhaled Antibiotics: What is Still Needed? 25th NACFC Conference, Anaheim, CA.
 27. **Stenbit, A.E** (2012) Inhaled Antibiotics: What is Still Needed? 26th NACFC Conference, Orlando, FL.
 28. **Stenbit, A.E.**, M.J. Bartz, and K.A. Lewis. (2012). The Use of the FRAX Calculator in the Evaluation of Bone Health in Patients with Cystic Fibrosis. 26th NACFC Conference, Orlando, FL.
 29. Bonadona, J.R., C.M. Pelic, J.O Ikemeh, M. DeBolt, and **A.E. Stenbit**. (2013) Changing Hospital Culture with Schwartz Center Rounds. CAB IV. Vancouver, Canada.

30. **Stenbit, AE** (2015). Keeping Percussion Alive for Medical Students with the “Lung Box”. American Thoracic Society. Denver, CO.

Book Chapters:

1. **Stenbit, A. E.** and K. J. Serio. Sepsis. In: Manual of Intensive Care Medicine (Fourth Edition) Richard S. Irwin and James M. Rippe (Eds.); Lippincott Williams and Wilkins; Division of Wolters Kluwer Health, Inc.
2. **Stenbit, A.E.** Sarcoidosis. In: Manual of Clinical Problems in Pulmonary Medicine (Sixth Edition); R.A. Bordow, A.L. Ries, and T.A Morris (Eds.); Boston/Toronto/London: Little, Brown and Company.
3. **Stenbit, A. E.** and K. J. Serio. Sepsis. In: Manual of Intensive Care Medicine (Fifth Edition) Richard S. Irwin and James M. Rippe (Eds.); Lippincott Williams and Wilkins; Division of Wolters Kluwer Health, Inc.

Other Presentations:

1. The Ohio State University Pulmonary Grand Rounds May 2005 “nNOS and a-syntrophin in the Heart”
2. University of Pittsburgh Pulmonary Grand Rounds 23 August 2005 “nNOS and a-syntrophin in the Heart”
3. Medical University of South Carolina Pulmonary Grand Rounds November 2005 “nNOS and a-syntrophin in the Heart”
4. University of California, San Diego, Pulmonary Grand Rounds December 2005 “Stem Cells: What a pulmonary clinician needs to know.”
5. Cystic Fibrosis Education Day 2007 “The Complications of Cystic Fibrosis and Inpatient Issues”
6. 17th Charleston Pulmonary and Critical Care Symposium April 20-22 2007 Kiawah Island South Carolina, “Stem Cells in Lung Injury”
7. 18th Charleston Pulmonary and Critical Care Symposium March 14-16 Charleston South Carolina, “Strategies to Eradicate Ventilator Associated Pneumonia”
8. Cystic Fibrosis Education Day 2008 “The Complications of Cystic Fibrosis and Inpatient Issues”
9. Nurses Competency Series- Education for 8E and 8W nurses 2009 “The Complications of Cystic Fibrosis and Inpatient Issues”
10. Outpatient Nurses: “Living with CF” August 2008
11. ATS- Sunrise Seminar: “Stem Cells: From Stem to Stern.” San Diego, California. May 2009
12. Physical Therapy Students: “The Basics of CF and exercise” July 2009
13. Speech Therapy Grand Rounds: “Understanding Chronic Ventilators. How the Vent Huddle has helped our patients.” September 2009
14. Nurses Competency Series- Education for 8E and 8W nurses 2010 “The Complications of Cystic Fibrosis and Inpatient Issues”
15. Cystic Fibrosis Partnership Day- “ NACF update for friends and family “ 5 December 2009
16. Moderator Schwartz Center Rounds- 2010-current
17. American Medical Women's Association Coffee Talk- 18 February 2010
18. Internship 101- 30 April 2010
19. Nurses Competency- 6W Early Mobilization in the Ventilated patient September 2010
20. Nurses Competency- 6W Modes of Ventilation, September 2010
21. Nurses Education Cystic Fibrosis Day- 15 November 2010- “Cystic Fibrosis-Complications”
22. Physician Assistant Lecture 26 January 2011- “ARDS- The Basics and Everyday Life”
23. Physical Therapy Students- “The Basics of CF and exercise” 12 July 2011

24. Pulmonary Fellows 23 August 2011- “Tracheostomy and Chronic ventilator weaning”
25. Vertex Education Day- “Complications of CF”. 21 October 2011
26. Physician Assistant Lecture 26 January 2012- “ARDS- The Basics and Everyday Life”
27. Nurse Education- Cystic Fibrosis- The Basics- 26 April 2012
28. Pulmonary Fellows 1 August 2012- “Tracheostomy and Chronic ventilator weaning”
29. Medicine Resident lecture September 2012- “Cystic Fibrosis: What a resident needs to know.”
30. South Carolina Society of Respiratory Care- October 2012- “CF and Germ Colonies.”
31. South Carolina Society of Respiratory Care- April 2013- “Understanding Pulmonary Function Testing.”
32. Pharmacy Residents and Students: “ A Whiteboard talk: Taking the Mystery out of Ventilators. May 2013
33. Pulmonary Fellows. “Pulmonary Embolism.” 9 September 2013
34. Physical Diagnosis workshops for Year 1 and Year 2 Medical Students
35. Physical Diagnosis lectures for Year 1 and Year 2 Medical Students.
36. Upstate Respiratory Therapy Symposium. “Early mobility in the ICU”
37. Upstate EMS meeting October 2016. “Pulmonary Hypertension the other hypertension”
38. Internal Medicine Residents October 2016. “Pulmonary Hypertension the other hypertension”
39. Internal Medicine Residents November 2016. “A Whiteboard talk: the mystery of pleural effusions.
40. Medical Students 4th year- “Ventilators and ABGs what you need to know for your internship”
41. ACCN 2018: Pulmonary Hypertension

Funding

1. Impact of Music in the ICU- Seed Grant GHS Foundation- 1 May 2017 (PI- Stenbit)
2. Program for Adult Care Excellence Award Cystic Fibrosis Foundation- 1 July 2008 (PI- Stenbit)
3. Bayer Healthcare AG- 1 May 2008 (PI- Stenbit) Randomized, double-blind, placebo-controlled, multi-center study to evaluate the safety and efficacy of inhaled ciprofloxacin compared to placebo in subjects with cystic fibrosis
4. Clinical Research Facilitation Award- Cystic Fibrosis Foundation (PI: Flume) 1 July 2008
5. Genetech- 1 February 2008 (PI- Conrad) IgE/Lung Function in CF Patients
6. MPEX- 1 January 2008 (PI- Flume) Two formulations of MP-376 solution Levofloxacin solution for inhalation
7. Tarr Foundation Grant- 2008
8. Clinical and Translational Science Award- Medical University of South Carolina 1 March 2007 (PI- Stenbit)
9. American Heart Association- National: Scientist Development Grant Activation 1 July 2005 (PI- Stenbit)
10. Veterans Administration – Advanced Career Development Award- Declined in lieu of the AHA

Clinical and Translational Trials

Investigator Cystic Fibrosis Trials

1. Genetic Modifiers of Cystic Fibrosis, Pulmonary Disease and Other Airway Inflammatory Disorders. PI: Stenbit
2. Improving Nutritional Outcomes in the MUSC Cystic Fibrosis Population. PI: Vireall-Lowell
3. COPD readmission rates. PI: Bullington
4. Effectiveness of Doripenem in Cystic Fibrosis PI: Lucas
5. The effect of inhaled tobramycin on the calculated tobramycin elimination rate constant in adult cystic fibrosis patients. PI: Stenbit
6. Improved glucose control in patients with cystic fibrosis at MUSC. PI: Stenbit
7. The use of the FRAX calculator in the evaluation of cystic fibrosis bone disease. Co-PI Katherine Lewis and Antine Stenbit

Industry Cystic Fibrosis Trials

1. G551D Observational Study (GOAL-OB-11) Vertex PI: Virella- Lowell
2. A Long-term Prospective Observational Safety Study of the Incidence of and Risk Factors for Fibrosing Colonopathy in US Patients with Cystic Fibrosis Treated with Pancreatic Enzyme Replacement Therapy: A Harmonized Protocol across Sponsors. Abbott Labs, Aptalis Pharma US, Inc., Janssen Research and Development, L.L.C. PI: Flume
3. Investigation of B cell Repertoire in Patients with Pseudomonas aeruginosa Infection flume Theraclone Sciences
- A Phase 3, Two-Arm, Rollover Study to Evaluate the Safety of Long-Term Ivacaftor Treatment in Subjects 6 Years of Age and Older with Cystic Fibrosis and a Non-G551D CFTR Mutation. Vertex PI: Flume
4. A Phase 2, Multicenter, Double-Blinded, Placebo-Controlled, 3-Part Study to Evaluate Safety, Efficacy, Pharmacokinetics, and Pharmacodynamics of VX-661 Monotherapy and VX-661/VX-770 Cotherapy in Subjects with Cystic Fibrosis, Homozygous for the F508del-CFTR Mutation. Vertex PI: Flume
5. 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 Vertex PI: Flume
6. A Prospective, 5-year Registry Study to Monitor the Susceptibility to Aztreonam of Pseudomonas aeruginosa (PA) Isolates from Patients with Cystic Fibrosis in the United States [AIR-CF5] Gilead Sciences, Inc PI: Virella-Lowell
7. A single arm, open-label, multicenter, Phase IV trial to assess long term safety of tobramycin inhalation powder (TIP) in patients with Cystic Fibrosis. Novartis PI: Virella-Lowell
8. A Three Week Dose Escalation, Randomized, Double-Blind, Placebo-Controlled Trial, to Assess the Safety and Tolerability of 100 mg or 200 mg of Inhaled Alpha-1 HC, Once a Day in Subjects with Cystic Fibrosis PI: Flume
9. A Randomized, Double-Blind, Placebo-Controlled, Multicenter, Phase 3 Trial to Assess the Efficacy and Safety of Tobramycin Inhalation Powder (TIP) in Cystic Fibrosis (CF) Subjects Novartis PI: Flume
10. A Randomized, Open-Label, Multicenter Phase 3 Trial to Assess the Safety of Tobramycin Inhalation Powder Compared to TOBI in Cystic Fibrosis Subjects Novartis PI: Flume
12. A Multicenter, Randomized, Double-Blind, Placebo-Controlled Trial of Pulmozyme Withdrawal on Exercise Tolerance in Cystic Fibrosis Subjects with Severe Lung Disease. Genetech PI: Flume
15. A Phase 1, Single- and Multi-dose, Single-blind, Placebo-control, Randomized Dose-escalation Multi-center Study to Evaluate the Safety, Tolerability and Pharmacokinetic Profile of MP-376 (Levofloxacin Solution for Inhalation) at up to Three Dose Levels Delivered by the Pari eFlow? Electronic Nebulizer for 14 days to Stable Cystic Fibrosis Patients. MPex Pharmaceuticals PI: Flume
16. A Phase I, Single-Blind, Randomized, Crossover Study to Evaluate the Safety, Tolerability, and Pharmacokinetic Profile of Two Formulations of MP-376 Solution (Levofloxacin Solution for Inhalation) Delivered by the PARI Eflow Device to Patients With Cystic Fibrosis. MPex Pharmaceuticals PI: Flume
17. 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 and FEV1 > or = to 75% but < or = to 110% Predicted. Inspire Pharmaceuticals PI: Virella-Lowell
18. Randomized, double-blind, placebo-controlled, multicenter study to evaluate the safety and efficacy of inhaled ciprofloxacin compared to placebo in subjects with cystic fibrosis. Bayer. PI: Stenbit

19. A Phase 2 Multi-Center, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Safety, Tolerability and Efficacy of Three Dosage Regimens of MP-376 Solution for Inhalation Given for 28 Days to Stable Cystic Fibrosis Patients MPex Pharmaceuticals PI: Flume
21. Long Term Administration of Inhaled Mannitol in Cystic Fibrosis - A Safety and Efficacy Study
22. A randomized, double-blind, placebo-controlled parallel group study to investigate the safety and efficacy of two doses of tiotropium bromide (2.5 ug and 5 ug) administered once daily via the Respimat(R) device for 12 weeks in patients with cystic fibrosis. Boehringer Ingelheim Pharmaceuticals PI:Flume
23. An Open-Label, Multicenter Trial to Validate the Quality of Life Questionnaire-Bronchiectasis and to Evaluate Perception of Symptom Improvement Following One Course of Aztreonam for Inhalation Solution (AZLI) in Subjects with Bronchiectasis and Gram-negative Bacteria in the Airways. Gilead Sciences PI: Flume
24. A Phase 2, Double-Blind, Multicenter, Randomized, Placebo-Controlled Trial Evaluating Fosfomycin/Tobramycin for Inhalation in Patients with Cystic Fibrosis and Pseudomonas aeruginosa
25. Study 08-114: Open-Label Extension of Study 08-110 A Multi-Center Study of Denufosal Tetrasodium Inhalation Solution in Patients with Cystic Fibrosis Lung Disease. Inspire Pharmaceuticals PI: Virella-Lowell
26. An Open-Label, Randomized, Phase 3 Trial to Evaluate the Efficacy and Safety of Aztreonam for Inhalation Solution versus 29. Tobramycin Inhalation Solution in an Intermittent Aerosolized Antibiotic Regimen in Patients with Cystic Fibrosis. Gilead Sciences PI: Virella-Lowell
27. A Phase 2, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study to Evaluate the Safety and Efficacy of VX 770 in Subjects Aged 12 Years and Older With Cystic Fibrosis who are Homozygous for the F508del-CFTR Mutation. Vertex Pharmaceuticals PI: Flume
28. Phase 3b Randomized, Double-Blind, Placebo-Controlled Two-Part Trial to Assess the Safety and Efficacy of Continuous Aztreonam for Inhalation Solution (AZLI) in Subjects with Cystic Fibrosis (CF) and Chronic Burkholderia Species Infection. Gilead Sciences PI: Flume
29. 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 for the F508del-CFTR Mutation. Vertex Pharmaceuticals PI: Flume
30. A randomised, double-blind, placebo-controlled parallel-group trial to confirm the efficacy after 12 weeks and the safety of tiotropium 5 ug administered once daily via the Respimat device in patients with cystic fibrosis. Boehringer Ingelheim Pharmaceuticals PI: Flume
31. MPEX-207: A Phase 3, Multicenter, multinational, randomized, double blind, placebo-controlled study to evaluate the efficacy and safety of MP-376 (Levofloxacin inhalation solution ;Aeroquin) in stable cystic fibrosis patients. MPex Pharmaceuticals PI: Flume
33. MPEX-209: A Phase 3, open-label, randomized trial to study to evaluate the efficacy and safety of MP-376 (Aeroquin) versus tobramycin inhalation solution(TIS) in stable cystic fibrosis patients. MPex Pharmaceuticals PI: Flume
34. A Phase 3, Double-Blind, Multicenter, Randomized, Placebo-Controlled Trial Evaluating Repeated Courses of Aztreonam for Inhalation Solution in Subjects with non-CF Bronchiectasis and Gram-Negative Endobronchial Infection (AIR-BX1). Gilead Sciences. PI: Flume

Investigator Non-Cystic Fibrosis Trials

1. Circulating Stem Cells and Cytokine Profile in Survivors of ARDS/ALI. PI: Stenbit

2. Molecular Markers of Malignancy Compared to Histology in Bronchial Samples Identified Using Narrow Band Imaging (NBI) Bronchoscopy or White-Light Bronchoscopy for Evaluation of Normal, Pre-malignant and Malignant Airways Disease. PI: Silvestri
3. Comparison of the Cytokine Profile Between Conventional Low-Tidal Volume Ventilation and Airway Pressure Release Ventilation in Patients with ARDS/ALI. PI: Stenbit
4. Randomized, Placebo Controlled Trial of the Effectiveness of Statins for Preventing Mortality following ICU Admission for Influenza Complications STIP: Statin Trial for Influenza Patients. PI: Pastis
5. Unraveling Yellow Nail Syndrome. PI: Stenbit
6. Impact of Music in the ICU. PI: Stenbit