

Last Updated July 2023

**Refereed Papers/Articles (directly supervised trainees underlined)**

1. Echeveste Sanchez M, Zhu M, Magee S, Grady S, Guerry H, Guhr-Lee TN, **Esther CR Jr**, Herman MA. Electronic Vaporization of Nicotine Salt or Freebase produces differential effects on metabolism, neuronal activity and behavior in male and female C57BL/6J mice. *Addict Neurosci*. 2023 Jun;6:100082. PMID: 37292173
2. De Vuyst RC, Bennard E, Kam CW, McKinzie CJ, **Esther CR**. Elexacaftor/tezacaftor/ivacaftor treatment reduces airway inflammation in cystic fibrosis. *Pediatr Pulmonol*. 2023 May;58(5):1592-1594. PMID: 36718851
3. Jain R, Wolf A, Molad M, Taylor-Cousar J, **Esther CR Jr**, Shteinberg M. Congenital bilateral cataracts in newborns exposed to elexacaftor-tezacaftor-ivacaftor in utero and while breast feeding. *J Cyst Fibros*. 2022 Nov;21(6):1074-1076. PMID: 36266182.
4. Echeveste Sanchez M, Quadir SG, Whindleton CM, Hoffman JL, Faccidomo SP, Guhr Lee TN, **Esther CR Jr**, Hodge CW, Herman MA. The effects of electronic nicotine vapor on voluntary alcohol consumption in female and male C57BL/6 J mice. *Drug Alcohol Depend*. 2022 Dec 1;241:109676. PMID: 36343590
5. **Esther CR Jr**, O'Neal WK, Alexis NE, Koch AL, Cooper CB, Barjaktarevic I, Raffield LM, Bowler RP, Comellas AP, Peters SP, Hastie AT, Curtis JL, Ronish B, Ortega VE, Wells JM, Halper-Stromberg E, Rennard SI, Boucher RC. Prolonged, Physiologically Relevant Nicotine Concentrations in the Airways of Smokers. *Am J Physiol Lung Cell Mol Physiol*. 2023 Jan 1;324(1):L32-L37. PMID: 36342131
6. **Esther CR Jr**, Kimura KS, Mikami Y, Edwards CE, Das SR, Freeman MH, Strickland BA, Brown HM, Wessinger BC, Gupta VC, Von Wahlde K, Sheng Q, Huang LC, Bacon DR, Kimple AJ, Ceppe AS, Kato T, Pickles RJ, Randell SH, Baric RS, Turner JH, Boucher RC. Pharmacokinetic-based failure of a detergent virucidal for SARS-COV-2 nasal infections: A preclinical study and randomized controlled trial. *Int Forum Allergy Rhinol*. 2022 Sep;12(9):1137-1147. PMID: 35040594. (Also published as a Preprint in *Res Sq*. 2021 May 14:rs.3.rs-500168. doi: 10.21203/rs.3.rs-500168/v1. PMID: 34013253)
7. Jain R, Magaret A, Vu PT, VanDalfsen JM, Keller A, Wilson A, Putman MS, Mayer-Hamblett N, **Esther CR Jr**, Taylor-Cousar JL. Prospectively evaluating maternal and fetal outcomes in the era of CFTR modulators: the MAYFLOWERS observational clinical trial study design. *BMJ Open Respir Res*. 2022 Jun;9(1):e001289. doi: 10.1136/bmjresp-2022-001289. PMID: 35710144
8. Madapoosi SS, Cruickshank-Quinn C, Opron K, Erb-Downward JR, Begley LA, Li G, Barjaktarevic I, Barr RG, Comellas AP, Couper D, Cooper CB, Freeman C, Han M, Kaner RJ, Labaki W, Martinez FJ, Ortega VE, Peters SP, Paine R, Woodruff P, Curtis JL, Huffnagle GB, Stringer KA, Bowler RP, **Esther CR Jr**, Reisdorph N, Huang YJ; SPIROMICS Research Group. Lung Microbiota and Metabolites Collectively Associate with Clinical Outcomes in Milder Stage COPD. *Am J Respir Crit Care Med*. 2022 May 10. doi: 10.1164/rccm.202110-2241OC. Online ahead of print. PMID: 35536732
9. Markovetz MR, Garbarine IC, Morrison CB, Kissner WJ, Seim I, Forest MG, Papanikolas MJ, Freeman R, Ceppe A, Ghio A, Alexis NE, Stick SM, Ehre C, Boucher RC, **Esther CR**, Muhlebach MS, Hill DB. Mucus and mucus flake composition and abundance reflect inflammatory and infection status in cystic fibrosis. *J Cyst Fibros*. 2022 Apr 15:S1569-1993(22)00097-2. doi: 10.1016/j.jcf.2022.04.008. Online ahead of print. PMID: 35437233
10. Rogers TD, Button B, Kelada SNP, Ostrowski LE, Livraghi-Butrico A, Gutay MI, **Esther CR Jr**, Grubb BR. Regional Differences in Mucociliary Clearance in the Upper and Lower Airways. *Front Physiol*. 2022 Mar 9;13:842592. eCollection 2022. PMID: 35356083
11. Collins B, Fortner C, Cotey A, **Esther CR**, Trimble A. Drug exposure to infants born to mothers taking Elexacaftor, Tezacaftor, and Ivacaftor. *J Cyst Fibros*. 2021 Dec 22:S1569-1993(21)02161-5. doi: 10.1016/j.jcf.2021.12.004. Online ahead of print. PMID: 34952795
12. **Esther CR Jr**, Kimura KS, Mikami Y, Edwards CE, Das SR, Freeman MH, Strickland BA, Brown HM, Wessinger BC, Gupta VC, Von Wahlde K, Sheng Q, Huang LC, Bacon DR, Kimple AJ, Ceppe AS, Kato T, Pickles RJ, Randell SH, Baric RS, Turner JH, Boucher RC. Pharmacokinetic-based failure of a detergent virucidal for SARS-COV-2 nasal infections: A preclinical study and randomized controlled trial. *Int Forum Allergy Rhinol*. 2022 Jan 18. doi: 10.1002/alr.22975. Online ahead of print. PMID: 35040594. (Also published as a Preprint in *Res Sq*. 2021 May 14:rs.3.rs-500168. doi: 10.21203/rs.3.rs-500168/v1. PMID: 34013253)

13. **Esther CR Jr**, O'Neal WK, Anderson WH, Kesimer M, Ceppe A, Doerschuk CM, Alexis NE, Hastie AT, Barr RG, Bowler RP, Wells JM, Oelsner EC, Comellas AP, Tesfaigzi Y, Kim V, Paulin LM, Cooper CB, Han MK, Huang YJ, Labaki WW, Curtis JL, Boucher RC; SPIROMICS. Identification of Sputum Biomarkers Predictive of Pulmonary Exacerbations in Chronic Obstructive Pulmonary Disease. *Chest*. 2022 May;161(5):1239-1249. doi: 10.1016/j.chest.2021.10.049. Epub 2021 Nov 18. PMID: 34801592
14. Zhu M, Echeveste Sanchez M, Douglass EA, Jahad JV, Hanback TD, Guhr Lee TN, **Esther CR Jr**, Cole M, Roberts AJ, Herman MA. Electronic nicotine vapor exposure produces differential changes in central amygdala neuronal activity, thermoregulation and locomotor behavior in male mice. *eNeuro*. 2021 Aug 11;8(4):ENEURO.0189-21.2021. doi: 10.1523/ENEURO.0189-21.2021. Print 2021 Jul-Aug. PMID: 34321216
15. Lin FC, Cai J, Fine JP, Dellon EP, Esther CR. Semiparametric estimation of the proportional rates model for recurrent events data with missing event category. *Stat Methods Med Res*. 2021 Jun 18:9622802211023975. doi: 10.1177/09622802211023975. Online ahead of print. PMID: 34142905.
16. Mahoney LB, Esther CR Jr, May K, Rosen R. Metabolomic profiling of extraesophageal reflux disease in children. *Clin Transl Sci*. 2021 May 31. doi: 10.1111/cts.13064. Online ahead of print. PMID: 34058076.
17. Gentzsch M, Cholon DM, Quinney NL, Martino MEB, Minges JT, Boyles SE, Guhr Lee TN, **Esther CR Jr**, Ribeiro CMP. Airway Epithelial Inflammation In Vitro Augments the Rescue of Mutant CFTR by Current CFTR Modulator Therapies. *Front Pharmacol*. 2021 Mar 30;12:628722. doi: 10.3389/fphar.2021.628722. eCollection 2021. PMID: 33859562
18. **Esther CR Jr**, Oermann CM, Ross KR, Weiss P. An assessment of fellowship training issues affecting the pediatric pulmonary medicine workforce. *Pediatr Pulmonol*. 2021 Jan 26. doi: 10.1002/ppul.25256. Online ahead of print. PMID: 33497527
19. Noah TL, Tolleson-Rinehart S, **Esther CR Jr**, Peterson-Carmichael SL, Davis SD, Moore PE. The Future of Pediatric Pulmonology: A Survey of Division Directors, Assessment of Current Research Funding, and Discussion of Workforce Trends. *Pediatr Pulmonol*. 2020 Dec 15. doi: 10.1002/ppul.25228. Online ahead of print. PMID: 33325144
20. Schneider S, Bailey M, Spears T, **Esther CR Jr**, Laughon MM, Hornik CP, Jackson W. Safety of sildenafil in premature infants with severe bronchopulmonary dysplasia (SILDI-SAFE): a multicenter, randomized, placebo-controlled, sequential dose-escalating, double-masked, safety study. *BMC Pediatr*. 2020 Dec 14;20(1):559. PMID: 33317479
21. Crocker M, Loughlin CE, **Esther CR**, Noah T, Fernández SP, Woo G, Parajón LC, Parajón D, Becker-Dreps S. Community Health Worker Case-Detection of Asthma or Reactive Airways Disease in a Resource-Poor Community in Nicaragua. *Pediatr Pulmonol*. 2021 May;56(5):1145-1154. doi: 10.1002/ppul.25187. PMID: 33241927
22. Xu J, Livraghi-Butrico A, Hou X, Rajagopalan C, Zhang J, Song J, Jiang H, Wei HG, Wang H, Bouhamdan M, Ruan J, Yang D, Qiu Y, Youming X, Barrett RP, McClellan SA, Mou H, Wu Q, Chen X, Rogers TD, Wilkinson KJ, Gilmore RC, **Esther CR Jr**, Zaman K, Liang X, Sobolic M, Hazlett L, Zhang K, Frizzell RA, Gentzsch M, O'Neal WK, Grubb BR, Chen YE, Boucher RC, Sun F. Phenotypes of CF rabbits generated by CRISPR/Cas9-mediated disruption of the CFTR gene. *JCI Insight*. 2021 Jan 11;6(1):e139813. doi: 10.1172/jci.insight.139813. PMID: 33232302
23. Guhr Lee TN, Cholon DM, Quinney NL, Gentzsch M, **Esther CR Jr**. Accumulation and Persistence of Ivacaftor in Airway Epithelia with Prolonged Treatment. *J Cyst Fibros*. *J Cyst Fibros*. 2020 Sep;19(5):746-751. PMID: 32536510.
24. Béziat V, Tavernier SJ, Chen YH, Ma CS, Materna M, Laurence A, Staal J, Aschenbrenner D, Roels L, Worley L, Claes K, Gartner L, Kohn LA, De Bruyne M, Schmitz-Abe K, Charbonnier LM, Keles S, Nammour J, Vladikine N, Maglorius Renkilaraj MRL, Seeleuthner Y, Migaud M, Rosain J, Jeljeli M, Boisson B, Van Braeckel E, Rosenfeld JA, Dai H, Burrage LC, Murdock DR, Lambrecht BN, Avettand-Fenoel V, Vogel TP; Undiagnosed Diseases Network, **Esther CR**, Haskologlu S, Dogu F, Ciznar P, Boutboul D, Ouachée-Chardin M, Amourette J, Lebras MN, Gauvain C, Tcherakian C, Ikinogullari A, Beyaert R, Abel L, Milner JD, Grimbacher B, Couderc LJ, Butte MJ, Freeman AF, Catherinot É, Fieschi C, Chatila TA, Tangye SG, Uhlig HH, Haerynck F, Casanova JL, Puel A. Dominant-negative mutations in human IL6ST underlie hyper-IgE syndrome. *J Exp Med*. 2020 Jun 1;217(6). pii: e20191804. PMID: 32207811 [Correction to Table S1: *J Exp Med*. 2020 Jun 1;217(7):e2019180405272020c. PMID 32516385]

25. Lopez Domowicz DA, Welsby I, **Esther CR Jr**, Zhu H, Marek RD, Lee G, Shah N, Poisson JL, McMahon TJ. Effects of repleting organic phosphates in banked erythrocytes on plasma metabolites and vasoactive mediators after red cell exchange transfusion in sickle cell disease. *lood Transfus.* 2020 May;18(3):200-207. PMID: 32203007
26. Guibbellot JS, Ryan KJ, Anderson JD, Liu Z, Kersh L, **Esther CR**, Rowe SM, Acosta EP. Variable cellular ivacaftor concentrations in people with cystic fibrosis on modulator therapy. *J Cyst Fibros.* 2020 Sep;19(5):742-745. PMID:32044246
27. Chada A, Leu RM, Perez IA, **Esther CR Jr**, Kasi AS. Positional Impairment of Gas Exchange during Diaphragm Pacing Alleviated by Increasing Amplitude Settings in Congenital Central Hypoventilation Syndrome. *J Clin Sleep Med.* 2020 Mar 15;16(3):459-462. PMID:31992416
28. Martiniano SL, **Esther CR Jr**, Haworth CS, Kasperbauer SH, Zemanick ET, Caverly LJ. Challenging cases in nontuberculous mycobacterial infection in cystic fibrosis. *Pediatr Pulmonol.* 2020 Feb;55(2):521-525. PMID: 31821718.
29. Ghosh A, Coakley RD, Ghio A, Muhlebach MS, **Esther CR Jr**, Alexis NE, Tarran R. Chronic E-Cigarette Use Increases Neutrophil Elastase and Matrix Metalloprotease Levels in the Lung. *Am J Respir Crit Care Med.* 2019 Dec 1;200(11):1392-1401. PMID: 31390877
30. Jones LA, Douchette L, Dellon EP, **Esther CR Jr**, McKinzie CJ. Use of inhaled imipenem/cilastatin in pediatric patients with cystic fibrosis: a case series, *J Cyst Fibros.* 2019 Jul;18(4):e42-e44. PMID: 31060800
31. **Esther CR Jr**, Muhlebach MS, Ehre C, Hill DB, Wolfgang MC, Kesimer M, Ramsey KA, Markovetz MR, Garbarine IC, Forest MG, Seim I, Zorn B, Morrison CB, Delion MF, Thelin WR, Villalon D, Sabater JR, Turkovic L, Ranganathan S, Stick SM, Boucher RC. Mucus accumulation in the lungs precedes structural changes and infection in children with cystic fibrosis. *Sci Transl Med.* 2019 Apr 3;11(486). pii: eaav3488. PMID: 30944166
32. Yu Y, **Esther CR Jr**, Ren CL, Loughlin C. Persistent Wheeze in Infants: A Guide for General Pediatricians. *Pediatr Ann.* 2019 Mar 1;48(3):e110-e114. PMID: 30874818
33. Ehre C, Rushton ZL, Wang B, Hothem LN, Fontana NC, Villalon D, Thelin WR, **Esther CR Jr**, Hill DB, Grubb BR, Livraghi-Butrico A, Donaldson SH, Boucher RC. Deficiencies of Inhaled N-Acetylcysteine: Rationale and Requirements for Improved Mucolytic Agents. *Am J Respir Crit Care Med.* 2019 Jan 15;199(2):171-180. PMID: 30212240
34. Bernstein AT, Leigh MW, Goralski JL, **Esther CR Jr**, McKinzie C. Use of telavancin in pediatric patients with cystic fibrosis and intolerance to vancomycin: a case series. *J Cyst Fibros.* 2018 Nov;17(6):e48-e5. PMID: 30170755.
35. Ghio AJ, Soukup JM, McGee J, Madden MC, and **Esther CR Jr**. Iron concentrations in exhaled breath condensate decrease in ever-smokers and COPD patients. *J Breath Res.* 2018 Aug 21;12(4). PMID 30079894.
36. Sanders CD, Guibbellot JS, Muhlebach MS, Feng-Chang L, Gilligan P, **Esther CR Jr**. Tracheostomy infections in children: epidemiology and clinical outcomes. *Pediatr Pulmonol.* 2018 Sep;53(9):1269-1275. PMID: 29968973
37. Trimble A, McKinzie C, Terrell M, Stringer E, **Esther CR Jr**. Measured fetal and neonatal exposure to lumacaftor and ivacaftor during pregnancy and while breastfeeding. *J Cyst Fibros.* 2018 Nov;17(6):779-782. PMID: 29866531
38. Ghio A, Madden MC, **Esther CR**. Transition and post-transition metals in exhaled breath condensate. *J Breath Res.* 2018 Feb 7;12(2):027112. PMID: 29244031.
39. McKinzie C, **Esther CR**, Vece T. Continuous vancomycin in a pediatric cystic fibrosis patient. *Pediatr Pulmonol.* 2018 Jan;53(1):E4-E5. PMID: 29193836.
40. Muhlebach MS, Zorn BT, **Esther CR**, Hatch JE, Murray CP, Turkovic L, Ranganathan SC, Boucher RC, Stick SM, Wolfgang MC. Initial acquisition and succession of the cystic fibrosis lung microbiome is associated with disease progression in infants and preschool children. *PLoS Pathog.* 2018 Jan 18;14(1):e1006798. PMID: 29346420
41. Livraghi-Butrico A, Wilkinson KJ, Volmer AS, Gilmore RC, Rogers TD, Caldwell RA, Burns KA, **Esther CR Jr**, Mall MA, Boucher RC, O'Neal WK, Grubb BR. Lung disease phenotypes caused by over-expression of combinations of alpha, beta, and gamma subunits of the epithelial sodium channel in mouse airways. *Am J Physiol Lung Cell Mol Physiol.* 2018 Feb 1;314(2):L318-L331. PMID: 29074490
42. Yu D, Saini Y, Chen G, Ghio AJ, Dang H, Burns KA, Wang Y, Davis RM, Randell SH, **Esther CR Jr**,

Paulsen F, Boucher RC. Loss of  $\beta$  Epithelial Sodium Channel Function in Meibomian Glands Produces Pseudohypoaldosteronism 1-Like Ocular Disease in Mice. *Am J Pathol*. 2018 Jan;188(1):95-110. PMID: 29107074

43. DaCosta A, Jordan C, Giddings O, Lin F-C, Gilligan P, **Esther CR Jr**. Outcomes associated with antibiotic regimens for treatment of Mycobacterium abscessus in cystic fibrosis patients. *J Cyst Fibros*. 2017 Jul; 16(4):483-487. PMID 28495380.
44. **Esther CR Jr**, Hill DB, Button B, Jania C, Duncan EA, Doerschuk CM, Ranganathan S, Stick SM, Boucher RC. The sialic acid to urea ratio as a measure of airway surface hydration. *Am J Physiol Lung Cell Mol Physiol*. 2017 Mar 1;312(3):L398-L404. PMID 28062483.
45. Bryant JM, Grogono DM, Rodriguez D, Everall I, Brown KP, Moreno P, Verma D, Drijkoningen J, Gilligan P, **Esther CR Jr**, Noone P, Giddings O, Scott C, Bell SC, Thomson R, Wainwright CE, Jones A, Bilton D, Laurenson I, Ruddy M, Smith G, Magee J, Bourke S, Bowler I, Chapman S, Clayton A, Cullen M, Daniels T, Dempsey O, Denton M, Desai M, Drew R, Edenborough F, Evans J, Fenton P, Folb J, Humphrey H, Isalska B, Jönsson B, Jones AM, MacGregor G, Mayell S, Millar M, Modha D, Nash E, O'Brien C, O'Brien D, Ohri C, Pao C, Peckham D, Perrin F, Prtak L, Qvist T, Robb A, Rodgers H, Schaffer K, van Ingen J, Walshaw M, Watson D, West N, Haworth CS, Harris SR, Ordway D, Parkhill J, Floto RA. Population-level genomics identifies the emergence and global spread of a human transmissible multidrug-resistant nontuberculous mycobacterium. *Science*. 2016 Nov;354(6313):751-757. PMID: 27846606
46. **Esther CR Jr**, Turkovic L, Rosenow T, Muhlebach MS, Boucher RC, Ranganathan S, Stick SM. Metabolomic biomarkers are associated with and predictive of early structural lung disease in cystic fibrosis. *Eur Respir J*. 2016 Dec;48(6):1612-1621. PMID: 27836957
47. Boyer D, Barsky E, Papantonakis CM, Pittman J, Ren CL, **Esther CR Jr**, Wilson KC, Thomson CC. Official ATS Clinical Practice Guideline: Summary for Clinicians. Diagnostic Evaluation of Infants with Recurrent or Persistent Wheezing. *Ann Am Thorac Soc*. 2016 Nov;13(11):2057-2059. PMID: 27831796
48. Ren CL\*, **Esther CR Jr\***, Debley J, Sockrider M, Yilmanz O, Amin N, Bassy-Asaad A, Davis SD, Durand M, Ewig JM, Yuksel H, Lombardi E, Noah TL, Radford P, Ranganathan S, Teper A, Weinberger M, Brozek J, Wilson KC. Official ATS Clinical Practice Guidelines: Diagnostic Evaluation of Infants with Recurrent or Persistent Wheezing. *Am J Resp Crit Care Med*. 2016 Aug 1;194(3):356-73 \*Co-chairs and equal contributors. PMID: 27479061
49. **Esther CR Jr**, Plonga R, Kerr A, Lin FC, Gilligan PH. Clinical outcomes in cystic fibrosis patients with Trichosporon respiratory infection. *J Cyst Fibros*. 2016 Sep;15(5)e45-9. PMID: 26936234
50. **Esther CR Jr**, Kerr A, Gilligan PH. Detection of Mycobacterium abscessus from deep pharyngeal swabs in cystic fibrosis. *Infect Control Hosp Epidemiol* 36(5):618-19, 2015. PMID: 25727723
51. **Esther CR Jr**, Coakley RD, Henderson AG, Zhou YH, Wright FA, Boucher RC. Metabolomic evaluation of neutrophilic airway inflammation in cystic fibrosis. *Chest* 148(2):507-15, 2015. PMID: 25611918
52. Cholon DM, Quinney NL, Fulcher ML, **Esther CR Jr**, Das J, Dokholyan NV, Randell SH, Boucher RC, Gentsch M. Potentiator Ivacaftor Abrogates Pharmacological Correction of  $\Delta F508$  CFTR in Cystic Fibrosis. *Sci Trans Med*. 6(246):246ra96, 2014. PMID: 25101886
53. **Esther CR Jr**, Lin F-C, Kerr A, Miller MB, Gilligan P. Respiratory viruses are associated with common respiratory pathogens in cystic fibrosis. *Pediatr Pulmonol*. 49(9):926-31, 2014. PMID: 24167159
54. **Esther CR Jr**, Boucher RC, Johnson MR, Ansele JH, Donn KH, O'Riordan TG, Ghio AJ, and Hirsh AJ. Airway drug pharmacokinetics via analysis of exhaled breath condensate. *Pulm Pharmacol Ther*. 27(1):76-82, 2014. PMID: 23932897
55. Lobo LJ, Chang LC, **Esther CR Jr**, Gilligan PH, Tulu Z, Noone PG. Lung transplant outcomes in cystic fibrosis patients with pre-operative Mycobacterium abscessus respiratory infections. *Clin Transplant*. 27(4):523-9, 2013. PMID: 23710571
56. **Esther CR Jr**, Olsen BM, Lin FC, Fine J, Boucher RC. Exhaled Breath Condensate Adenosine Tracks Lung Function Changes in Cystic Fibrosis. *Am J Physiol Lung Cell Mol Physiol*. 304(7):L504-9, 2013. PMID: 23355385
57. Shapiro AJ, **Esther CR Jr**, Leigh MW, Dellon EP. Vaccine Induced Hepatitis A and B Protection in Children at Risk for Cystic Fibrosis Associated Liver Disease. *Vaccine*. 31(6):906-11, 2013. PMID: 23261047

58. Patel K, Davis SD, Johnson R, **Esther CR Jr**. Exhaled breath condensate purines correlate with lung function in infants and preschoolers. *Pediatr Pulmonol*. 48(2):182-7, 2013. PMID: 22615171
59. **Esther CR Jr**, Lazaar AL, Bordonali E, Qaqish B, Boucher RC. Elevated airway purines in chronic obstructive pulmonary disease. *Chest*. 140(4):954-60, 2011. PMID: 21454402
60. **Esther CR Jr**, Peden DB, Alexis NE, Hernandez ML. Airway purinergic responses in healthy, atopic and asthmatic subjects exposed to ozone. *Inhal Toxicol*. 23(6):324-30, 2011. PMID: 20816188
61. Shomaker KL, Weiner T, **Esther CR Jr**. Impact of an evidence-based algorithm on quality of care in pediatric parapneumonic effusion and empyema. *Pediatr Pulmonol*. 46(7):722-8, 2011. PMID: 21328575
62. **Esther CR Jr**, Hoberman S, Fine J, Allen S, Culbreath K, Rodino K, Kerr A, Gilligan P. Detection of rapidly growing mycobacteria in routine cystic fibrosis cultures. *J Clin Microbiol* 49(4):1421-5, 2011. PMID: 21289148
63. Hernandez ML, Lay JC, Harris B, **Esther CR Jr**, Brickey WJ, Bromberg PA, Diaz-Sanchez D, Devlin RB, Kleeberger SR, Alexis NE, Peden DB. Atopic asthmatic subjects but not atopic subjects without asthma have enhanced inflammatory response to ozone. *J Allergy Clin Immunol* 126:537-44, 2010. PMID: 20816188
64. **Esther CR Jr**, Esserman DA, Gilligan P, Kerr A, Noone PG. Chronic Mycobacterium abscessus infection and lung function decline in cystic fibrosis. *J Cyst Fibros* 9: 117-23, 2010. PMID: 20071249
65. Loughlin CE, **Esther CR Jr**, Lazarowski ER, Alexis NE, Peden DB. Neutrophilic inflammation is associated with altered airway hydration in stable asthmatics. *Respir Med* 104: 29-33, 2010. PMID: 19646854
66. **Esther CR Jr**, Boysen G, Olsen BM, Collins LB, Ghio AJ, Swenberg JW, Boucher RC. Mass spectrometric analysis of biomarkers and dilution markers in exhaled breath condensate reveals elevated purines in asthma and cystic fibrosis. *Am J Physiol Lung Cell Mol Physiol* 296: L987-93, 2009. PMID:19304910
67. Wolak JE, **Esther CR Jr**, O'Connell TM. Metabolomic analysis of bronchoalveolar lavage fluid from cystic fibrosis patients. *Biomarkers* 14: 55-60, 2009. PMID: 19283525
68. Sesma JI, **Esther CR Jr**, Kreda SM, Jones L, O'Neal W, Nishihara S, Nicholas RA, Lazarowski ER. Endoplasmic reticulum/golgi nucleotide sugar transporters contribute to the cellular release of UDP-sugar signaling molecules. *J Biol Chem* 284: 12572-83, 2009. PMID: 19276090
69. **Esther CR Jr**, Sesma JI, Dohlman HG, Ault AD, Clas ML, Lazarowski ER, Boucher RC. Similarities between UDP-glucose and adenine nucleotide release in yeast: involvement of the secretory pathway. *Biochemistry* 47: 9269-78, 2008. PMID: 18693752
70. **Esther CR Jr**, Jasin HM, Collins LB, Swenberg JA, Boysen G. A mass spectrometric method to simultaneously measure a biomarker and dilution marker in exhaled breath condensate. *Rapid Commun Mass Spectrom* 22: 701-5, 2008. PMID: 18257110
71. **Esther CR Jr**, Alexis NE, Clas ML, Lazarowski ER, Donaldson SH, Ribeiro CM, Moore CG, Davis SD, Boucher RC. Extracellular purines are biomarkers of neutrophilic airway inflammation. *Eur Respir J* 31: 949-56, 2008. PMID: 18256064
72. **Esther CR Jr**, Henry MM, Molina PL, Leigh MW. Nontuberculous mycobacterial infection in young children with cystic fibrosis. *Pediatr Pulmonol* 40: 39-44, 2005. PMID: 15858802
73. Barker PM, **Esther CR Jr**, Fordham LA, Maygarden SJ, Funkhouser WK. Primary pulmonary lymphangiectasia in infancy and childhood. *Eur Respir J* 24: 413-9, 2004. PMID: 15358700
74. **Esther CR Jr**, Barker PM. Pulmonary lymphangiectasia: diagnosis and clinical course. *Pediatr Pulmonol* 38: 308-13, 2004. PMID: 15334508
75. Bernstein KE, **Esther CR Jr**. The functional role of angiotensin-converting enzyme as explored by using knockout mice. *Adv Nephrol Necker Hosp*. 1998;28:213-23. PMID 9889992.
76. **Esther CR Jr**, Semeniuk D, Marino EM, Zhou Y, Overbeek PA, Bernstein KE. Expression of testis angiotensin-converting enzyme is mediated by a cyclic AMP responsive element. *Lab Invest*. 1997 Nov;77(5):483-8. PMID 9389791.
77. **Esther CR Jr**, Marino EM, Bernstein KE. The role of Angiotensin-converting enzyme in blood pressure control, renal function, and male fertility. *Trends Endocrinol Metab*. 1997 Jul;8(5):181-6. PMID 18406804.
78. **Esther CR**, Marino EM, Howard TE, Machaud A, Corvol P, Capecchi MR, Bernstein KE. The critical role of tissue angiotensin-converting enzyme as revealed by gene targeting in mice. *J Clin Invest*. 1997 May 15;99(10):2375-85. PMID 9153279.

79. **Esther CR Jr**, Howard TE, Zhou Y, Capecchi MR, Marrero MB, Bernstein KE. Lessons from angiotensin-converting enzyme-deficient mice. *Curr Opin Nephrol Hypertens*. 1996 Nov;5(6):463-7. PMID 8978990.
80. **Esther CR Jr**, Howard TE, Marino EM, Goddard JM, Capecchi MR, Bernstein KE. Mice lacking angiotensin-converting enzyme have low blood pressure, renal pathology, and reduced male fertility. *Lab Invest*. 1996 May;74(5):953-65. PMID 8642790.
81. **Esther CR Jr**, Thomas KE, Bernstein KE. Chicken lacks the testis specific isozyme of angiotensin converting enzyme found in mammals. *Biochem Biophys Res Commun*. 1994 Dec 30;205(3):1916-21. PMID 7811282.
82. Roland KL, **Esther CR**, Spitznagel JK. Isolation and characterization of a gene, pmrD, from *Salmonella typhimurium* that confers resistance to polymyxin when expressed in multiple copies. *J Bacteriol*. 1994 Jun;176(12):3589-97. PMID 8206837.
83. Roland KL, Martin LE, **Esther CR**, Spitznagel JK. Spontaneous pmrA mutants of *Salmonella typhimurium* LT2 define a new two-component regulatory system with a possible role in virulence. *J Bacteriol*. 1993 Jul;175(13):4154-64. PMID 8391535.