

Publications by Gene Therapy Center Members

January 2010 to December 2010

*** Collaborative publications with two or more Gene Therapy Center Members (44 total)

1. Agarwal S, Loh YH, McLoughlin EM, Huang J, Park IH, Miller JD, Huo H, Okuka M, Dos Reis RM, Loewer S, Ng HH, Keefe DL, Goldman FD, Klingelhutz AJ, Liu L and Daley GQ. Telomere elongation in induced pluripotent stem cells from dyskeratosis congenita patients. *Nature*. 2010;464(7286):292-6.
2. Ahmadi A, Li Q, Muller K, Collins D, Valentine JF, Drane W and Polyak S. Diagnostic value of noninvasive combined fluorine-18 labeled fluoro-2-deoxy-D-glucose positron emission tomography and computed tomography enterography in active Crohn's disease. *Inflamm Bowel Dis*. 2010;16(6):974-81.
3. *** Alford SK, van Beek EJ, McLennan G and Hoffman EA. Heterogeneity of pulmonary perfusion as a mechanistic image-based phenotype in emphysema susceptible smokers. *Proc Natl Acad Sci U S A*. 2010;107(16):7485-90. PMID: 2867701.
4. Anderson K, Fernandez C and Rice KG. N-glycan targeted gene delivery to the dendritic cell SIGN receptor. *Bioconjug Chem*. 2010;21(8):1479-85.
5. Apicella MA, Post DM, Fowler AC, Jones BD, Rasmussen JA, Hunt JR, Imagawa S, Choudhury B, Inzana TJ, Maier TM, Frank DW, Zahrt TC, Chaloner K, Jennings MP, McLendon MK and Gibson BW. Identification, characterization and immunogenicity of an O-antigen capsular polysaccharide of *Francisella tularensis*. *PLoS One*. 2010;5(7):e11060. PMID: 2897883.
6. Banasik MB and McCray PB, Jr. Integrase-defective lentiviral vectors: progress and applications. *Gene Ther*. 2010;17(2):150-7.
7. Barr RG, Bluemke DA, Ahmed FS, Carr JJ, Enright PL, Hoffman EA, Jiang R, Kawut SM, Kronmal RA, Lima JA, Shahar E, Smith LJ and Watson KE. Percent emphysema, airflow obstruction, and impaired left ventricular filling. *N Engl J Med*. 2010;362(3):217-27. PMID: 2887729.
8. Baumhover NJ, Anderson K, Fernandez CA and Rice KG. Synthesis and in vitro testing of new potent polyacridine-melittin gene delivery peptides. *Bioconjug Chem*. 2010;21(1):74-83. PMID: 2813064.
9. Ben-Shahar Y, Lu B, Collier DM, Snyder PM, Schnizler M and Welsh MJ. The *Drosophila* gene *CheB42a* is a novel modifier of *Deg/ENaC* channel function. *PLoS One*. 2010;5(2):e9395. PMID: 2827562.
10. *** Beyer AM, Guo DF, Sheffield VC and Rahmouni K. Contrasting vascular effects caused by loss of Bardet-Biedl syndrome genes. *Am J Physiol Heart Circ Physiol*. 2010;299(6):H1902-7.
11. Bonde S, Pedram M, Stultz R and Zavazava N. Cell fusion of bone marrow cells and somatic cell reprogramming by embryonic stem cells. *FASEB J*. 2010;24(2):364-73. PMID: 2812034.
12. Boodram B, Hershov RC, Klinzman D and Stapleton JT. GB virus C infection among young, HIV-negative injection drug users with and without hepatitis C virus infection. *J Viral Hepat*. 2010.
13. Boudreau RL and Davidson BL. RNAi therapeutics for CNS disorders. *Brain Res*. 2010;1338:112-21.
14. Caraballo JC, Yshii C, Westphal W, Moninger T and Comellas AP. Ambient particulate matter affects occludin distribution and increases alveolar transepithelial electrical conductance. *Respirology*. 2010.

15. *** Case AJ, McGill JL, Tygrett LT, Shirasawa T, Spitz DR, Waldschmidt TJ, Legge KL and Domann FE. Elevated mitochondrial superoxide disrupts normal T cell development, impairing adaptive immune responses to an influenza challenge. *Free Radic Biol Med*. 2010.
16. Cesario R, Amicucci L, Cardinali A, Castaldo C, Marinucci M, Panaccione L, Santini F, Tudisco O, Apicella ML, Calabro G, Cianfarani C, Frigione D, Galli A, Mazzitelli G, Mazzotta C, Pericoli V, Schettini G, Tuccillo AA, Angelini B, Apruzzese G, Barbato E, Belli G, Bin W, Boncagni L, Botrugno A, Briguglio S, Bruschi A, Ceccuzzi S, Centioli C, Cirant S, Crisanti F, D'Arcangelo O, De Angelis R, Di Matteo L, Di Troia C, Esposito B, Fogaccia G, Fusco V, Gabellieri L, Garavaglia A, Giovannozzi E, Granucci G, Grossetti G, Grosso G, Iannone F, Maddaluno G, Marocco D, Micozzi P, Milovanov A, Mirizzi F, Monari G, Moro A, Novak S, Orsitto FP, Panella M, Pucella G, Ravera G, Sternini E, Vitale E, Vlad G, Zanza V, Zerbini M and Zonca F. Current drive at plasma densities required for thermonuclear reactors. *Nat Commun*. 2010;1(5):1-8.
17. Chandra D, Lipson DA, Hoffman EA, Hansen-Flaschen J, Sciruba FC, Decamp MM, Reilly JJ and Washko GR. Perfusion scintigraphy and patient selection for lung volume reduction surgery. *Am J Respir Crit Care Med*. 2010;182(7):937-46. PMID: 2970864.
18. Chang EH, Lee JH and Zabner J. Tryptase does not alter transepithelial conductance or paracellular permeability in human airway epithelial cells. *Am J Rhinol Allergy*. 2010;24(2):126-8.
19. Chapleau MW and Sabharwal R. Methods of assessing vagus nerve activity and reflexes. *Heart Fail Rev*. 2010.
20. *** Chen JH, Stoltz DA, Karp PH, Ernst SE, Pezzulo AA, Moninger TO, Rector MV, Reznikov LR, Launspach JL, Chaloner K, Zabner J and Welsh MJ. Loss of anion transport without increased sodium absorption characterizes newborn porcine cystic fibrosis airway epithelia. *Cell*. 2010;143(6):911-23.
21. Cho HJ, Joo NS and Wine JJ. Mucus secretion from individual submucosal glands of the ferret trachea. *Am J Physiol Lung Cell Mol Physiol*. 2010;299(1):L124-36. PMID: 2904090.
22. Cho MH, Washko GR, Hoffmann TJ, Criner GJ, Hoffman EA, Martinez FJ, Laird N, Reilly JJ and Silverman EK. Cluster analysis in severe emphysema subjects using phenotype and genotype data: an exploratory investigation. *Respir Res*. 2010;11:30. PMID: 2850331.
23. Choi J, Xia G, Tawhai MH, Hoffman EA and Lin CL. Numerical study of high-frequency oscillatory air flow and convective mixing in a CT-based human airway model. *Ann Biomed Eng*. 2010;38(12):3550-71.
24. Chrissobolis S, Zhang Z, Kinzenbaw DA, Lynch CM, Russo AF and Faraci FM. Receptor activity-modifying protein-1 augments cerebrovascular responses to calcitonin gene-related peptide and inhibits angiotensin II-induced vascular dysfunction. *Stroke*. 2010;41(10):2329-34.
25. Christiano A, Kulesz-Martin M and Bickenbach JR. Montagna Symposium 2009: Genetic-epigenetic Basis of Skin Diseases. *J Invest Dermatol*. 2010;130(5):1199-201.
26. *** Chu X, Filali M, Stanic B, Takapoo M, Sheehan A, Bhalla R, Lamb FS and Miller FJ, Jr. A Critical Role for CIC-3 in Smooth Muscle Cell Activation and Neointima Formation. *Arterioscler Thromb Vasc Biol*. 2010.
27. Chu Y and Heistad DD. No answer to Alzheimer's disease? *Circ Res*. 2010;107(12):1400-2.
28. Comellas AP, Kelly AM, Trejo HE, Briva A, Lee J, Sznajder JI and Dada LA. Insulin regulates alveolar epithelial function by inducing Na⁺/K⁺-ATPase translocation to the plasma membrane in a process mediated by the action of Akt. *J Cell Sci*. 2010;123(Pt 8):1343-51. PMID: 2848117.

29. Da Silva LF, Desantana JM and Sluka KA. Activation of NMDA receptors in the brainstem, rostral ventromedial medulla, and nucleus reticularis gigantocellularis mediates mechanical hyperalgesia produced by repeated intramuscular injections of acidic saline in rats. *J Pain*. 2010;11(4):378-87. PMID: 2933661.
30. *** Da Silva LF, Walder RY, Davidson BL, Wilson SP and Sluka KA. Changes in expression of NMDA-NR1 receptor subunits in the rostral ventromedial medulla modulate pain behaviors. *Pain*. 2010;151(1):155-61. PMID: 2943935.
31. Daugirdas JT, Depner TA, Greene T, Levin NW, Chertow GM, Rocco MV and Stokes JB. Effects of reduced intradialytic urea generation rate and residual renal clearance on modeled urea distribution volume and Kt/V in conventional, daily, and nocturnal dialysis. *Semin Dial*. 2010;23(1):19-24.
32. Davis MK, Valentine JF, Weinstein DA and Polyak S. Antibodies to CBir1 are associated with glycogen storage disease type Ib. *J Pediatr Gastroenterol Nutr*. 2010;51(1):14-8. PMID: 2893276.
33. DeSantana JM, da Silva LF and Sluka KA. Cholecystokinin receptors mediate tolerance to the analgesic effect of TENS in arthritic rats. *Pain*. 2010;148(1):84-93.
34. Desch M, Schreiber A, Schweda F, Madsen K, Friis UG, Weatherford ET, Sigmund CD, Sequeira Lopez ML, Gomez RA and Todorov VT. Increased renin production in mice with deletion of peroxisome proliferator-activated receptor-gamma in juxtaglomerular cells. *Hypertension*. 2010;55(3):660-6. PMID: 2907524.
35. *** Ding SL, Tecedor L, Stein CS and Davidson BL. A knock-in reporter mouse model for Batten disease reveals predominant expression of Cln3 in visual, limbic and subcortical motor structures. *Neurobiol Dis*. 2011;41(2):237-48.
36. Du G, Dutta N, Lashmit P and Stinski MF. Alternative splicing of the human cytomegalovirus major immediate-early genes affects infectious-virus replication and control of cellular cyclin-dependent kinase. *J Virol*. 2011;85(2):804-17.
37. Ealy M and Smith RJ. The genetics of otosclerosis. *Hear Res*. 2010;266(1-2):70-4.
38. *** Ebert SM, Monteys AM, Fox DK, Bongers KS, Shields BE, Malmberg SE, Davidson BL, Suneja M and Adams CM. The transcription factor ATF4 promotes skeletal myofiber atrophy during fasting. *Mol Endocrinol*. 2010;24(4):790-9. PMID: 2852358.
39. Esser AK, Cohen MB and Henry MD. Dystroglycan is not required for maintenance of the luminal epithelial basement membrane or cell polarity in the mouse prostate. *Prostate*. 2010;70(7):777-87. PMID: 2857647.
40. Estin ML, Stoltz DA and Zabner J. Paraoxonase 1, Quorum Sensing, and *P. aeruginosa* Infection: A Novel Model. *Adv Exp Med Biol*. 2010;660:183-93.
41. *** Excoffon KJ, Gansemer ND, Mobily ME, Karp PH, Parekh KR and Zabner J. Isoform-specific regulation and localization of the coxsackie and adenovirus receptor in human airway epithelia. *PLoS One*. 2010;5(3):e9909. PMID: 2845650.
42. Falsetta ML, McEwan AG, Jennings MP and Apicella MA. Anaerobic metabolism occurs in the substratum of gonococcal biofilms and may be sustained in part by nitric oxide. *Infect Immun*. 2010;78(5):2320-8. PMID: 2863506.
43. Feng Y, Xia H, Cai Y, Halabi CM, Becker LK, Santos RA, Speth RC, Sigmund CD and Lazartigues E. Brain-selective overexpression of human Angiotensin-converting enzyme type 2 attenuates neurogenic hypertension. *Circ Res*. 2010;106(2):373-82. PMID: 2818798.

44. Fernandez CA, Baumhover NJ, Anderson K and Rice KG. Discovery of metabolically stabilized electronegative polyacridine-PEG peptide DNA open polyplexes. *Bioconjug Chem.* 2010;21(4):723-30. PMID: 2860281.
45. Fernandez CA, Baumhover NJ, Duskey JT, Khargharia S, Kizzire K, Ericson MD and Rice KG. Metabolically stabilized long-circulating PEGylated polyacridine peptide polyplexes mediate hydrodynamically stimulated gene expression in liver. *Gene Ther.* 2011;18(1):23-37. PMID: 2990782.
46. *** Fitzgerald MP, Madsen JM, Coleman MC, Teoh ML, Westphal SG, Spitz DR, Radi R and Domann FE. Transgenic biosynthesis of trypanothione protects *Escherichia coli* from radiation-induced toxicity. *Radiat Res.* 2010;174(3):290-6. PMID: 2942016.
47. Flotte TR, Fischer AC, Goetzmann J, Mueller C, Cebotaru L, Yan Z, Wang L, Wilson JM, Guggino WB and Engelhardt JF. Dual reporter comparative indexing of rAAV pseudotyped vectors in chimpanzee airway. *Mol Ther.* 2010;18(3):594-600. PMID: 2839428.
48. Folk JC and Stone EM. Ranibizumab therapy for neovascular age-related macular degeneration. *N Engl J Med.* 2010;363(17):1648-55.
49. Fulton RB, Meyerholz DK and Varga SM. Foxp3⁺ CD4 regulatory T cells limit pulmonary immunopathology by modulating the CD8 T cell response during respiratory syncytial virus infection. *J Immunol.* 2010;185(4):2382-92. PMID: 2923480.
50. *** Gakhar L, Bartlett JA, Penterman J, Mizrahi D, Singh PK, Mallampalli RK, Ramaswamy S and McCray PB, Jr. PLUNC is a novel airway surfactant protein with anti-biofilm activity. *PLoS One.* 2010;5(2):e9098. PMID: 2817724.
51. Gao Z, Chen B, Joiner ML, Wu Y, Guan X, Koval OM, Chaudhary AK, Cunha SR, Mohler PJ, Martins JB, Song LS and Anderson ME. I(f) and SR Ca(2⁺) release both contribute to pacemaker activity in canine sinoatrial node cells. *J Mol Cell Cardiol.* 2010;49(1):33-40. PMID: 2883640.
52. Gautam M, Benson CJ and Sluka KA. Increased response of muscle sensory neurons to decreases in pH after muscle inflammation. *Neuroscience.* 2010;170(3):893-900. PMID: 2939292.
53. Go AS, Parikh CR, Ikizler TA, Coca S, Siew ED, Chinchilli VM, Hsu CY, Garg AX, Zappitelli M, Liu KD, Reeves WB, Ghahramani N, Devarajan P, Faulkner GB, Tan TC, Kimmel PL, Eggers P and Stokes JB. The assessment, serial evaluation, and subsequent sequelae of acute kidney injury (ASSESS-AKI) study: design and methods. *BMC Nephrol.* 2010;11:22. PMID: 2944247.
54. Goodwin J, Tinckam K, denHollander N, Haroon A, Keshavjee S and Cserti-Gazdewich CM. Transfusion-related acute lung injury (TRALI) in graft by blood donor antibodies against host leukocytes. *J Heart Lung Transplant.* 2010;29(9):1067-70.
55. Gourronc FA, Robertson M, Herrig AK, Lansdorp PM, Goldman FD and Klingelutz AJ. Proliferative defects in dyskeratosis congenita skin keratinocytes are corrected by expression of the telomerase reverse transcriptase, TERT, or by activation of endogenous telomerase through expression of papillomavirus E6/E7 or the telomerase RNA component, TERC. *Exp Dermatol.* 2010;19(3):279-88. PMID: 2852488.
56. Granio O, Ashbourne Excoffon KJ, Henning P, Melin P, Norez C, Gonzalez G, Karp PH, Magnusson MK, Habib N, Lindholm L, Becq F, Boulanger P, Zabner J and Hong SS. Adenovirus 5-fiber 35 chimeric vector mediates efficient apical correction of the cystic fibrosis transmembrane conductance regulator defect in cystic fibrosis primary airway epithelia. *Hum Gene Ther.* 2010;21(3):251-69.
57. *** Griesenbach U, Meng C, Farley R, Wasowicz MY, Munkonge FM, Chan M, Stoneham C, Sumner-

- Jones SG, Pringle IA, Gill DR, Hyde SC, Stevenson B, Holder E, Ban H, Hasegawa M, Cheng SH, Scheule RK, Sinn PL, McCray PB, Jr. and Alton EW. The use of carboxymethylcellulose gel to increase non-viral gene transfer in mouse airways. *Biomaterials*. 2010;31(9):2665-72.
58. Grobe JL, Dickson ME, Park S, Davis DR, Born EJ and Sigmund CD. Cardiovascular consequences of genetic variation at -6/235 in human angiotensinogen using "humanized" gene-targeted mice. *Hypertension*. 2010;56(5):981-7. PMID: 2959143.
59. Grobe JL, Grobe CL, Beltz TG, Westphal SG, Morgan DA, Xu D, de Lange WJ, Li H, Sakai K, Thedens DR, Cassis LA, Rahmouni K, Mark AL, Johnson AK and Sigmund CD. The brain Renin-angiotensin system controls divergent efferent mechanisms to regulate fluid and energy balance. *Cell Metab*. 2010;12(5):431-42. PMID: 2994017.
60. Groskreutz DJ, Babor EC, Monick MM, Varga SM and Hunninghake GW. Respiratory syncytial virus limits alpha subunit of eukaryotic translation initiation factor 2 (eIF2alpha) phosphorylation to maintain translation and viral replication. *J Biol Chem*. 2010;285(31):24023-31. PMID: 2911276.
61. Gross KW, Gomez RA and Sigmund CD. Twists and turns in the search for the elusive renin processing enzyme: focus on "Cathepsin B is not the processing enzyme for mouse prorenin". *Am J Physiol Regul Integr Comp Physiol*. 2010;298(5):R1209-11.
62. Gudmundsson H, Hund TJ, Wright PJ, Kline CF, Snyder JS, Qian L, Koval OM, Cunha SR, George M, Rainey MA, Kashef FE, Dun W, Boyden PA, Anderson ME, Band H and Mohler PJ. EH domain proteins regulate cardiac membrane protein targeting. *Circ Res*. 2010;107(1):84-95. PMID: 2901408.
63. *** Guo DF, Beyer AM, Yang B, Nishimura DY, Sheffield VC and Rahmouni K. Inactivation of Bardet-Biedl syndrome genes cause kidney defects. *Am J Physiol Renal Physiol*. 2010.
64. Han B, Haitsma JJ, Zhang Y, Bai X, Rubacha M, Keshavjee S, Zhang H and Liu M. Long pentraxin PTX3 deficiency worsens LPS-induced acute lung injury. *Intensive Care Med*. 2010.
65. Han R, Frett EM, Levy JR, Rader EP, Lueck JD, Bansal D, Moore SA, Ng R, Beltran-Valero de Bernabe D, Faulkner JA and Campbell KP. Genetic ablation of complement C3 attenuates muscle pathology in dysferlin-deficient mice. *J Clin Invest*. 2010;120(12):4366-74. PMID: 2993587.
66. Hansdottir S, Monick MM, Lovan N, Powers L, Gerke A and Hunninghake GW. Vitamin D decreases respiratory syncytial virus induction of NF-kappaB-linked chemokines and cytokines in airway epithelium while maintaining the antiviral state. *J Immunol*. 2010;184(2):965-74.
67. Harris GM, Dodelzon K, Gong L, Gonzalez-Alegre P and Paulson HL. Splice isoforms of the polyglutamine disease protein ataxin-3 exhibit similar enzymatic yet different aggregation properties. *PLoS One*. 2010;5(10):e13695. PMID: 2965175.
68. He X, Han B, Bai X, Zhang Y, Cypel M, Mura M, Keshavjee S and Liu M. PTX3 as a potential biomarker of acute lung injury: supporting evidence from animal experimentation. *Intensive Care Med*. 2010;36(2):356-64.
69. Hildebrand MS, Avenarius MR, Fellous M, Zhang Y, Meyer NC, Auer J, Serres C, Kahrizi K, Najmabadi H, Beckmann JS and Smith RJ. Genetic male infertility and mutation of CATSPER ion channels. *Eur J Hum Genet*. 2010;18(11):1178-84. PMID: 2987470.
70. Hildebrand MS, Gandolfo L, Shearer AE, Webster JA, Jensen M, Kimberling WJ, Stephan D, Huygen PL, Smith RJ and Bahlo M. A novel mutation in COCH-implications for genotype-phenotype correlations in DFNA9 hearing loss. *Laryngoscope*. 2010;120(12):2489-93.

71. Hildebrand MS, Thorne NP, Bromhead CJ, Kahrizi K, Webster JA, Fattahi Z, Bataejad M, Kimberling WJ, Stephan D, Najmabadi H, Bahlo M and Smith RJ. Variable hearing impairment in a DFNB2 family with a novel MYO7A missense mutation. *Clin Genet.* 2010;77(6):563-71. PMID: 2891191.
72. Hildebrand MS, Witmer PD, Xu S, Newton SS, Kahrizi K, Najmabadi H, Valle D and Smith RJ. miRNA mutations are not a common cause of deafness. *Am J Med Genet A.* 2010;152A(3):646-52. PMID: 2830307.
73. Hjortshoj TD, Gronskov K, Philp AR, Nishimura DY, Riise R, Sheffield VC, Rosenberg T and Brondum-Nielsen K. Bardet-Biedl syndrome in Denmark--report of 13 novel sequence variations in six genes. *Hum Mutat.* 2010;31(4):429-36.
74. Hong L, Krishnamachari Y, Seabold D, Joshi V, Schneider G and Salem AK. Intracellular Release of 17-beta Estradiol from Cationic Polyamidoamine Dendrimer Surface-Modified Poly (Lactic-co-Glycolic Acid) Microparticles Improves Osteogenic Differentiation of Human Mesenchymal Stromal Cells. *Tissue Eng Part C Methods.* 2010.
75. Hu X, Adamcakova-Dodd A, Lehmler HJ, Hu D, Kania-Korwel I, Hornbuckle KC and Thorne PS. Time course of congener uptake and elimination in rats after short-term inhalation exposure to an airborne polychlorinated biphenyl (PCB) mixture. *Environ Sci Technol.* 2010;44(17):6893-900.
76. Hund TJ, Koval OM, Li J, Wright PJ, Qian L, Snyder JS, Gudmundsson H, Kline CF, Davidson NP, Cardona N, Rasband MN, Anderson ME and Mohler PJ. A beta(IV)-spectrin/CaMKII signaling complex is essential for membrane excitability in mice. *J Clin Invest.* 2010;120(10):3508-19. PMID: 2947241.
77. *** Hunninghake GW, Doerschug KC, Nymon AB, Schmidt GA, Meyerholz DK and Ashare A. Insulin-like growth factor-1 levels contribute to the development of bacterial translocation in sepsis. *Am J Respir Crit Care Med.* 2010;182(4):517-25. PMID: 2937242.
78. Hunt CL, Kolokoltssov AA, Davey RA and Maury W. The Tyro3 receptor kinase Axl enhances macropinocytosis of Zaire ebolavirus. *J Virol.* 2011;85(1):334-47.
79. *** Husted RF, Lu H, Sigmund RD and Stokes JB. Oxygen regulation of the epithelial Na channel (ENaC) in the collecting duct. *Am J Physiol Renal Physiol.* 2010.
80. Intra J and Salem AK. Rational design, fabrication, characterization and in vitro testing of biodegradable microparticles that generate targeted and sustained transgene expression in HepG2 liver cells. *J Drug Target.* 2010.
81. Intra J and Salem AK. Fabrication, characterization and in vitro evaluation of poly(D,L-lactide-co-glycolide) microparticles loaded with polyamidoamine-plasmid DNA dendriplexes for applications in nonviral gene delivery. *J Pharm Sci.* 2010;99(1):368-84. PMID: 2882054.
82. Isomura H, Stinski MF, Murata T, Nakayama S, Chiba S, Akatsuka Y, Kanda T and Tsurumi T. The human cytomegalovirus UL76 gene regulates the level of expression of the UL77 gene. *PLoS One.* 2010;5(7):e11901. PMID: 2912765.
83. Johnson CD and Davidson BL. Huntington's disease: progress toward effective disease-modifying treatments and a cure. *Hum Mol Genet.* 2010;19(R1):R98-R102. PMID: 2875055.
84. Johnston JW, Shamsulddin H, Miller AF and Apicella MA. Sialic acid transport and catabolism are cooperatively regulated by SiaR and CRP in nontypeable *Haemophilus influenzae*. *BMC Microbiol.* 2010;10:240. PMID: 2946308.
85. Jones KB, Piombo V, Searby C, Kurriger G, Yang B, Grabellus F, Roughley PJ, Morcuende JA, Buckwalter

- JA, Capecchi MR, Vortkamp A and Sheffield VC. A mouse model of osteochondromagenesis from clonal inactivation of *Ext1* in chondrocytes. *Proc Natl Acad Sci U S A*. 2010;107(5):2054-9. PMID: 2836675.
86. Joo NS, Cho HJ, Khansaheb M and Wine JJ. Hyposecretion of fluid from tracheal submucosal glands of CFTR-deficient pigs. *J Clin Invest*. 2010;120(9):3161-6. PMID: 2929738.
87. Kang CH, Anraku M, Cypel M, Sato M, Yeung J, Gharib SA, Pierre AF, de Perrot M, Waddell TK, Mingyao L and Keshavjee S. Transcriptional signatures in donor lungs from donation after cardiac death vs after brain death: A functional pathway analysis. *J Heart Lung Transplant*. 2010.
88. Karolak W, Cypel M, Chen F, Daniel L, Chaparro C and Keshavjee S. Constrictive pericarditis after lung transplantation: an under-recognized complication. *J Heart Lung Transplant*. 2010;29(5):578-81.
89. *** Keen HL, Halabi CM, Beyer AM, de Lange WJ, Liu X, Maeda N, Faraci FM, Casavant TL and Sigmund CD. Bioinformatic analysis of gene sets regulated by ligand-activated and dominant-negative peroxisome proliferator-activated receptor gamma in mouse aorta. *Arterioscler Thromb Vasc Biol*. 2010;30(3):518-25. PMID: 2850258.
90. Ketsawatsomkron P, Pelham CJ, Groh S, Keen HL, Faraci FM and Sigmund CD. Does peroxisome proliferator-activated receptor-gamma (PPAR gamma) protect from hypertension directly through effects in the vasculature? *J Biol Chem*. 2010;285(13):9311-6. PMID: 2843178.
91. Khansaheb M, Choi JY, Joo NS, Yang YM, Krouse M and Wine JJ. Properties of Substance P-stimulated Mucus Secretion from Porcine Tracheal Submucosal Glands. *Am J Physiol Lung Cell Mol Physiol*. 2010.
92. Kim EM and Zavazava N. Differentiation of human embryonic stem cells into hematopoietic cells in vitro. *Methods Mol Biol*. 2010;651:89-101.
93. Kimberling WJ, Hildebrand MS, Shearer AE, Jensen ML, Halder JA, Trzuppek K, Cohn ES, Weleber RG, Stone EM and Smith RJ. Frequency of Usher syndrome in two pediatric populations: Implications for genetic screening of deaf and hard of hearing children. *Genet Med*. 2010;12(8):512-6.
94. Ko AC, Hernandez J, Brinton JP, Faidley EA, Mugge SA, Mets MB, Kardon RH, Folk JC, Mullins RF and Stone EM. Anti-gamma-enolase autoimmune retinopathy manifesting in early childhood. *Arch Ophthalmol*. 2010;128(12):1590-5.
95. Kolker SJ, Walder RY, Usachev Y, Hillman J, Boyle DL, Firestein GS and Sluka KA. Acid-sensing ion channel 3 expressed in type B synoviocytes and chondrocytes modulates hyaluronan expression and release. *Ann Rheum Dis*. 2010;69(5):903-9.
96. Kong X, Cho MH, Anderson W, Coxson HO, Muller N, Washko G, Hoffman EA, Bakke P, Gulsvik A, Lomas DA, Silverman EK and Pillai SG. Genome-wide Association Study Identifies *BICD1* as a Susceptibility Gene for Emphysema. *Am J Respir Crit Care Med*. 2011;183(1):43-9.
97. Koval OM, Guan X, Wu Y, Joiner ML, Gao Z, Chen B, Grumbach IM, Luczak ED, Colbran RJ, Song LS, Hund TJ, Mohler PJ and Anderson ME. *CaV1.2* beta-subunit coordinates *CaMKII*-triggered cardiomyocyte death and afterdepolarizations. *Proc Natl Acad Sci U S A*. 2010;107(11):4996-5000. PMID: 2841943.
98. Kreiner L, Christel CJ, Benveniste M, Schwaller B and Lee A. Compensatory regulation of *Cav2.1* Ca^{2+} channels in cerebellar Purkinje neurons lacking parvalbumin and calbindin D-28k. *J Neurophysiol*. 2010;103(1):371-81. PMID: 2807225.
99. Kurella Tamura M, Larive B, Unruh ML, Stokes JB, Nissenson A, Mehta RL and Chertow GM. Prevalence and correlates of cognitive impairment in hemodialysis patients: the Frequent Hemodialysis Network trials. *Clin*

J Am Soc Nephrol. 2010;5(8):1429-38. PMCID: 2924414.

100. Langlois RA, Meyerholz DK, Coleman RA, Cook RT, Waldschmidt TJ and Legge KL. Oseltamivir treatment prevents the increased influenza virus disease severity and lethality occurring in chronic ethanol consuming mice. *Alcohol Clin Exp Res.* 2010;34(8):1425-31. PMCID: 2910177.
101. Lataro RM, Castania JA, Chapleau MW, Salgado HC and Fazan R, Jr. Baroreceptor and chemoreceptor contributions to the hypertensive response to bilateral carotid occlusion in conscious mice. *Am J Physiol Heart Circ Physiol.* 2010;299(6):H1990-5.
102. Lee JC, Christie JD and Keshavjee S. Primary graft dysfunction: definition, risk factors, short- and long-term outcomes. *Semin Respir Crit Care Med.* 2010;31(2):161-71.
103. Leonoudakis D, Singh M, Mohajer R, Mohajer P, Fata JE, Campbell KP and Muschler JL. Dystroglycan controls signaling of multiple hormones through modulation of STAT5 activity. *J Cell Sci.* 2010;123(Pt 21):3683-92. PMCID: 2964112.
104. Li H, Li W, Gupta AK, Mohler PJ, Anderson ME and Grumbach IM. Calmodulin kinase II is required for angiotensin II-mediated vascular smooth muscle hypertrophy. *Am J Physiol Heart Circ Physiol.* 2010;298(2):H688-98. PMCID: 2822565.
105. Li J, Kline CF, Hund TJ, Anderson ME and Mohler PJ. Ankyrin-B regulates Kir6.2 membrane expression and function in heart. *J Biol Chem.* 2010;285(37):28723-30. PMCID: 2937900.
106. Li W, Li H, Sanders PN, Mohler PJ, Backs J, Olson EN, Anderson ME and Grumbach IM. The multifunctional Ca²⁺/calmodulin-dependent kinase II $\{\delta\}$ (CaMKII $\{\delta\}$) controls neointima formation after carotid ligation and vascular smooth muscle cell proliferation through cell cycle regulation by p21. *J Biol Chem.* 2010.
107. *** Lin L, Shen S, Jiang P, Sato S, Davidson BL and Xing Y. Evolution of alternative splicing in primate brain transcriptomes. *Hum Mol Genet.* 2010;19(15):2958-73. PMCID: 2901138.
108. Lin P, Shankar SP, Duncan J, Slavotinek A, Stone EM and Rutar T. Retinal vascular abnormalities and dragged maculae in a carrier with a new NDP mutation (c.268delC) that caused severe Norrie disease in the proband. *J AAPOS.* 2010;14(1):93-6.
109. *** Lindemann SR, Peng K, Long ME, Hunt JR, Apicella MA, Monack DM, Allen LA and Jones BD. *F. tularensis* Schu S4 mutants in O-antigen and capsule biosynthesis genes induce early cell death in human macrophages. *Infect Immun.* 2010.
110. *** Liou LY, Walsh KB, Vartanian AR, Beltran-Valero de Bernabe D, Welch M, Campbell KP, Oldstone MB and Kunz S. Functional glycosylation of dystroglycan is crucial for thymocyte development in the mouse. *PLoS One.* 2010;5(3):e9915. PMCID: 2848029.
111. Liu S, Lin L, Jiang P, Wang D and Xing Y. A comparison of RNA-Seq and high-density exon array for detecting differential gene expression between closely related species. *Nucleic Acids Res.* 2010.
112. *** Liu X, Luo M, Xie W, Wells JM, Goodheart MJ and Engelhardt JF. Sox17 modulates Wnt3A/beta-catenin-mediated transcriptional activation of the Lef-1 promoter. *Am J Physiol Lung Cell Mol Physiol.* 2010;299(5):L694-710. PMCID: 2980392.
113. Lively GD, Jiang B, Hedberg-Buenz A, Chang B, Petersen GE, Wang K, Kuehn MH and Anderson MG. Genetic dependence of central corneal thickness among inbred strains of mice. *Invest Ophthalmol Vis Sci.* 2010;51(1):160-71. PMCID: 2869057.

114. Lively GD, Koehn D, Hedberg-Buenz A, Wang K and Anderson MG. Quantitative trait loci associated with murine central corneal thickness. *Physiol Genomics*. 2010;42(2):281-6.
115. Lu P, Hankel IL, Knisz J, Marquardt A, Chiang MY, Grosse J, Constien R, Meyer T, Schroeder A, Zeitlmann L, Al-Alem U, Friedman AD, Elliott EI, Meyerholz DK, Waldschmidt TJ, Rothman PB and Colgan JD. The Justy mutation identifies Gon4-like as a gene that is essential for B lymphopoiesis. *J Exp Med*. 2010;207(7):1359-67. PMID: 2901076.
116. Lueck JD, Rossi AE, Thornton CA, Campbell KP and Dirksen RT. Sarcolemmal-restricted localization of functional CIC-1 channels in mouse skeletal muscle. *J Gen Physiol*. 2010;136(6):597-613. PMID: 2995150.
117. Maga TK, Meyer NC, Belsha C, Nishimura CJ, Zhang Y and Smith RJ. A novel deletion in the RCA gene cluster causes atypical hemolytic uremic syndrome. *Nephrol Dial Transplant*. 2010.
118. Maga TK, Nishimura CJ, Weaver AE, Frees KL and Smith RJ. Mutations in alternative pathway complement proteins in American patients with atypical hemolytic uremic syndrome. *Hum Mutat*. 2010;31(6):E1445-60.
119. Mahajan VB and Stone EM. Patients with an acute zonal occult outer retinopathy-like illness rapidly improve with valacyclovir treatment. *Am J Ophthalmol*. 2010;150(4):511-8.
120. Mahajan VB, Vallone JG, Lin JH, Mullins RF, Ko AC, Folk JC and Stone EM. T-cell infiltration in autosomal dominant neovascular inflammatory vitreoretinopathy. *Mol Vis*. 2010;16:1034-40. PMID: 2893052.
121. *** Manzel LJ, Shi L, O'Shaughnessy PT, Thorne PS and Look DC. Cigarette Smoke Inhibition of the NF- κ B-Dependent Response to Bacteria in the Airway. *Am J Respir Cell Mol Biol*. 2010.
122. Matsuda JJ, Filali MS, Collins MM, Volk KA and Lamb FS. The CIC-3 Cl⁻/H⁺ antiporter becomes uncoupled at low extracellular pH. *J Biol Chem*. 2010;285(4):2569-79. PMID: 2807314.
123. *** Matsuda JJ, Filali MS, Moreland JG, Miller FJ and Lamb FS. Activation of swelling-activated chloride current by tumor necrosis factor- α requires CIC-3-dependent endosomal reactive oxygen production. *J Biol Chem*. 2010;285(30):22864-73. PMID: 2906278.
124. McCaffrey RL, Schwartz JT, Lindemann SR, Moreland JG, Buchan BW, Jones BD and Allen LA. Multiple mechanisms of NADPH oxidase inhibition by type A and type B *Francisella tularensis*. *J Leukoc Biol*. 2010;88(4):791-805. PMID: 2974429.
125. Meland MN, Herndon ME and Stipp CS. Expression of α 5 integrin rescues fibronectin responsiveness in NT2N CNS neuronal cells. *J Neurosci Res*. 2010;88(1):222-32. PMID: 2863016.
126. *** Meyer KJ, Davis LK, Schindler EI, Beck JS, Rudd DS, Grundstad AJ, Scheetz TE, Braun TA, Fingert JH, Alward WL, Kwon YH, Folk JC, Russell SR, Wassink TH, Stone EM and Sheffield VC. Genome-wide analysis of copy number variants in age-related macular degeneration. *Hum Genet*. 2011;129(1):91-100.
127. *** Meyerholz DK, Stoltz DA, Namati E, Ramachandran S, Pezzulo AA, Smith AR, Rector MV, Suter MJ, Kao S, McLennan G, Tearney GJ, Zabner J, McCray PB, Jr. and Welsh MJ. Loss of cystic fibrosis transmembrane conductance regulator function produces abnormalities in tracheal development in neonatal pigs and young children. *Am J Respir Crit Care Med*. 2010;182(10):1251-61. PMID: 3001264.
128. *** Meyerholz DK, Stoltz DA, Pezzulo AA and Welsh MJ. Pathology of gastrointestinal organs in a porcine model of cystic fibrosis. *Am J Pathol*. 2010;176(3):1377-89. PMID: 2832157.

129. *** Miller FJ, Jr., Chu X, Stanic B, Tian X, Sharma RV, Davisson RL and Lamb FS. A differential role for endocytosis in receptor-mediated activation of Nox1. *Antioxid Redox Signal*. 2010;12(5):583-93. PMID: 2861543.
130. Miller JD, Peotta VA, Chu Y, Weiss RM, Zimmerman K, Brooks RM and Heistad DD. MnSOD protects against COX1-mediated endothelial dysfunction in chronic heart failure. *Am J Physiol Heart Circ Physiol*. 2010;298(5):H1600-7. PMID: 2867433.
131. Miller JD, Weiss RM, Serrano KM, Castaneda LE, Brooks RM, Zimmerman K and Heistad DD. Evidence for active regulation of pro-osteogenic signaling in advanced aortic valve disease. *Arterioscler Thromb Vasc Biol*. 2010;30(12):2482-6. PMID: 2996870.
132. Modestou MA, Manzel LJ, El-Mahdy S and Look DC. Inhibition of IFN-gamma-dependent antiviral airway epithelial defense by cigarette smoke. *Respir Res*. 2010;11:64. PMID: 2890646.
133. Mohr EL, Murthy KK, McLinden JH, Xiang J and Stapleton JT. The natural history of non-human GB virus C in captive chimpanzees. *J Gen Virol*. 2011;92(Pt 1):91-100.
134. Mohr EL, Xiang J, McLinden JH, Kaufman TM, Chang Q, Montefiori DC, Klinzman D and Stapleton JT. GB virus type C envelope protein E2 elicits antibodies that react with a cellular antigen on HIV-1 particles and neutralize diverse HIV-1 isolates. *J Immunol*. 2010;185(7):4496-505.
135. Monick MM, Powers LS, Walters K, Lovan N, Zhang M, Gerke A, Hansdottir S and Hunninghake GW. Identification of an autophagy defect in smokers' alveolar macrophages. *J Immunol*. 2010;185(9):5425-35.
136. *** Monteys AM, Spengler RM, Wan J, Tecedor L, Lennox KA, Xing Y and Davidson BL. Structure and activity of putative intronic miRNA promoters. *RNA*. 2010;16(3):495-505. PMID: 2822915.
137. Morgan DA and Rahmouni K. Differential effects of insulin on sympathetic nerve activity in agouti obese mice. *J Hypertens*. 2010;28(9):1913-9. PMID: 2920344.
138. Morris MJ, Na ES and Johnson AK. Mineralocorticoid receptor antagonism prevents hedonic deficits induced by a chronic sodium appetite. *Behav Neurosci*. 2010;124(2):211-24. PMID: 2941442.
139. Munroe ME, Businga TR, Kline JN and Bishop GA. Anti-inflammatory effects of the neurotransmitter agonist Honokiol in a mouse model of allergic asthma. *J Immunol*. 2010;185(9):5586-97.
140. Mura M, Binnie M, Han B, Li C, Andrade CF, Shiozaki A, Zhang Y, Ferrara N, Hwang D, Waddell TK, Keshavjee S and Liu M. Functions of type II pneumocyte-derived vascular endothelial growth factor in alveolar structure, acute inflammation, and vascular permeability. *Am J Pathol*. 2010;176(4):1725-34. PMID: 2843464.
141. Nash EF, Coonar A, Kremer R, Tullis E, Hutcheon M, Singer LG, Keshavjee S and Chaparro C. Survival of Burkholderia cepacia sepsis following lung transplantation in recipients with cystic fibrosis. *Transpl Infect Dis*. 2010;12(6):551-4.
142. *** Nishimura DY, Baye LM, Perveen R, Searby CC, Avila-Fernandez A, Pereiro I, Ayuso C, Valverde D, Bishop PN, Manson FD, Urquhart J, Stone EM, Slusarski DC, Black GC and Sheffield VC. Discovery and functional analysis of a retinitis pigmentosa gene, C2ORF71. *Am J Hum Genet*. 2010;86(5):686-95. PMID: 2868997.
143. *** O'Keefe BR, Giomarelli B, Barnard DL, Shenoy SR, Chan PK, McMahon JB, Palmer KE, Barnett BW, Meyerholz DK, Wohlford-Lenane CL and McCray PB, Jr. Broad-spectrum in vitro activity and in vivo efficacy of the antiviral protein griffithsin against emerging viruses of the family Coronaviridae. *J Virol*. 2010;84(5):2511-21. PMID: 2820936.

144. Oldstone MB and Campbell KP. Decoding arenavirus pathogenesis: Essential roles for alpha-dystroglycan-virus interactions and the immune response. *Virology*. 2010.
145. Page ME, Bao L, Andre P, Pelta-Heller J, Sluzas E, Gonzalez-Alegre P, Bogush A, Khan LE, Iacovitti L, Rice ME and Ehrlich ME. Cell-autonomous alteration of dopaminergic transmission by wild type and mutant (DeltaE) TorsinA in transgenic mice. *Neurobiol Dis*. 2010;39(3):318-26.
146. Pasadhika S, Fishman GA, Stone EM, Lindeman M, Zelkha R, Lopez I, Koenekoop RK and Shahidi M. Differential macular morphology in patients with RPE65-, CEP290-, GUCY2D-, and AIPL1-related Leber congenital amaurosis. *Invest Ophthalmol Vis Sci*. 2010;51(5):2608-14. PMID: 2868490.
147. Pena-Silva RA and Heistad DD. EP1c times for angiotensin: EP1 receptors facilitate angiotensin II-induced vascular dysfunction. *Hypertension*. 2010;55(4):846-8. PMID: 2860758.
148. Peters AL, Stunz LL, Meyerholz DK, Mohan C and Bishop GA. Latent membrane protein 1, the EBV-encoded oncogenic mimic of CD40, accelerates autoimmunity in B6.Sle1 mice. *J Immunol*. 2010;185(7):4053-62.
149. Pezzulo AA, Starner TD, Scheetz TE, Traver GL, Tilley AE, Harvey BG, Crystal RG, McCray PB, Jr. and Zabner J. The air-liquid interface and use of primary cell cultures are important to recapitulate the transcriptional profile of in vivo airway epithelia. *Am J Physiol Lung Cell Mol Physiol*. 2011;300(1):L25-31.
150. Porvasnik SL, Mah C and Polyak S. Targeting murine small bowel and colon through selective superior mesenteric artery injection. *Microsurgery*. 2010;30(6):487-93.
151. *** Pretorius PR, Baye LM, Nishimura DY, Searby CC, Bugge K, Yang B, Mullins RF, Stone EM, Sheffield VC and Slusarski DC. Identification and functional analysis of the vision-specific BBS3 (ARL6) long isoform. *PLoS Genet*. 2010;6(3):e1000884. PMID: 2841623.
152. Racila D, Winter M, Said M, Tomanek-Chalkley A, Wiechert S, Eckert RL and Bickenbach JR. Transient expression of OCT4 is sufficient to allow human keratinocytes to change their differentiation pathway. *Gene Ther*. 2010.
153. Radi ZA, Meyerholz DK and Ackermann MR. Pulmonary cyclooxygenase-1 (COX-1) and COX-2 cellular expression and distribution after respiratory syncytial virus and parainfluenza virus infection. *Viral Immunol*. 2010;23(1):43-8. PMID: 2883516.
154. *** Raikwar SP and Zavazava N. Spontaneous In Vivo Differentiation of Embryonic Stem Cell-Derived Pancreatic Endoderm-Like Cells Corrects Hyperglycemia in Diabetic Mice. *Transplantation*. 2010.
155. Recober A, Kaiser EA, Kuburas A and Russo AF. Induction of multiple photophobic behaviors in a transgenic mouse sensitized to CGRP. *Neuropharmacology*. 2010;58(1):156-65. PMID: 2784010.
156. Redding KM, Chen BL, Singh A, Re RN, Navar LG, Seth DM, Sigmund CD, Tang WW and Cook JL. Transgenic mice expressing an intracellular fluorescent fusion of angiotensin II demonstrate renal thrombotic microangiopathy and elevated blood pressure. *Am J Physiol Heart Circ Physiol*. 2010;298(6):H1807-18. PMID: 2886647.
157. Rogan MP, Reznikov LR, Pezzulo AA, Gansemer ND, Samuel M, Prather RS, Zabner J, Fredericks DC, McCray PB, Jr., Welsh MJ and Stoltz DA. Pigs and humans with cystic fibrosis have reduced insulin-like growth factor 1 (IGF1) levels at birth. *Proc Natl Acad Sci U S A*. 2010;107(47):20571-5. PMID: 2996661.
158. Rosenberg T, Roos B, Johnsen T, Bech N, Scheetz TE, Larsen M, Stone EM and Fingert JH. Clinical

and genetic characterization of a Danish family with North Carolina macular dystrophy. *Mol Vis.* 2010;16:2659-68. PMID: 3002954.

159. Rutkowski DT and Hegde RS. Regulation of basal cellular physiology by the homeostatic unfolded protein response. *J Cell Biol.* 2010;189(5):783-94. PMID: 2878945.

160. *** Sabharwal R, Zhang Z, Lu Y, Abboud FM, Russo AF and Chapleau MW. Receptor activity-modifying protein 1 increases baroreflex sensitivity and attenuates Angiotensin-induced hypertension. *Hypertension.* 2010;55(3):627-35. PMID: 2902886.

161. Saha PK, Gao Z, Alford SK, Sonka M and Hoffman EA. Topomorphologic separation of fused isointensity objects via multiscale opening: separating arteries and veins in 3-D pulmonary CT. *IEEE Trans Med Imaging.* 2010;29(3):840-51.

162. *** Samuel I, Yuan Z, Meyerholz DK, Twait E, Williard DE and Kempuraj D. A novel model of severe gallstone pancreatitis: murine pancreatic duct ligation results in systemic inflammation and substantial mortality. *Pancreatology.* 2010;10(5):536-44. PMID: 2992635.

163. *** Sapp JC, Nishimura D, Johnston JJ, Stone EM, Heon E, Sheffield VC and Biesecker LG. Recurrence risks for Bardet-Biedl syndrome: Implications of locus heterogeneity. *Genet Med.* 2010;12(10):623-7.

164. Satz JS, Ostendorf AP, Hou S, Turner A, Kusano H, Lee JC, Turk R, Nguyen H, Ross-Barta SE, Westra S, Hoshi T, Moore SA and Campbell KP. Distinct functions of glial and neuronal dystroglycan in the developing and adult mouse brain. *J Neurosci.* 2010;30(43):14560-72. PMID: 2979314.

165. *** Schindler EI, Nylen EL, Ko AC, Affatigato LM, Heggen AC, Wang K, Sheffield VC and Stone EM. Deducing the pathogenic contribution of recessive ABCA4 alleles in an outbred population. *Hum Mol Genet.* 2010;19(19):3693-701. PMID: 2935854.

166. *** Seo S, Baye LM, Schulz NP, Beck JS, Zhang Q, Slusarski DC and Sheffield VC. BBS6, BBS10, and BBS12 form a complex with CCT/TRiC family chaperonins and mediate BBSome assembly. *Proc Natl Acad Sci U S A.* 2010;107(4):1488-93. PMID: 2824390.

167. Sequeira-Lopez ML, Weatherford ET, Borges GR, Monteagudo MC, Pentz ES, Harfe BD, Carretero O, Sigmund CD and Gomez RA. The microRNA-processing enzyme dicer maintains juxtaglomerular cells. *J Am Soc Nephrol.* 2010;21(3):460-7. PMID: 2831866.

168. Shearer AE, DeLuca AP, Hildebrand MS, Taylor KR, Gurrola J, 2nd, Scherer S, Scheetz TE and Smith RJ. Comprehensive genetic testing for hereditary hearing loss using massively parallel sequencing. *Proc Natl Acad Sci U S A.* 2010;107(49):21104-9. PMID: 3000272.

169. Sheffield VC. The blind leading the obese: the molecular pathophysiology of a human obesity syndrome. *Trans Am Clin Climatol Assoc.* 2010;121:172-81; discussion 81-2. PMID: 2917141.

170. Shen S, Warzecha CC, Carstens RP and Xing Y. MADS+: discovery of differential splicing events from Affymetrix exon junction array data. *Bioinformatics.* 2010;26(2):268-9. PMID: 2804303.

171. Shin SS, Keshavjee S, Gelmanova IY, Atwood S, Franke MF, Mishustin SP, Strelis AK, Andreev YG, Pasechnikov AD, Barnashov A, Tonkel TP and Cohen T. Development of extensively drug-resistant tuberculosis during multidrug-resistant tuberculosis treatment. *Am J Respir Crit Care Med.* 2010;182(3):426-32. PMID: 2921603.

172. *** Sieren JC, Weydert J, Namati E, Thiesse J, Sieren JP, Reinhardt JM, Hoffman EA and McLennan

G. A process model for direct correlation between computed tomography and histopathology application in lung cancer. *Acad Radiol.* 2010;17(2):169-80.

173. Sigmund CD. Endothelial and vascular muscle PPAR γ in arterial pressure regulation: lessons from genetic interference and deficiency. *Hypertension.* 2010;55(2):437-44. PMID: 2819308.

174. *** Sisson TH, Mendez M, Choi K, Subbotina N, Courey A, Cunningham A, Dave A, Engelhardt JF, Liu X, White ES, Thannickal VJ, Moore BB, Christensen PJ and Simon RH. Targeted injury of type II alveolar epithelial cells induces pulmonary fibrosis. *Am J Respir Crit Care Med.* 2010;181(3):254-63. PMID: 2817814.

175. Skeie JM, Fingert JH, Russell SR, Stone EM and Mullins RF. Complement component C5a activates ICAM-1 expression on human choroidal endothelial cells. *Invest Ophthalmol Vis Sci.* 2010;51(10):5336-42.

176. Song YJ and Stinski MF. Human cytomegalovirus IE86 protein binds to cellular Mcm3 protein but does not inhibit its binding to the Epstein-Barr virus oriP in U373MG-p220.2 cells. *Acta Virol.* 2010;54(2):125-30.

177. Stanic B, Katsuyama M and Miller FJ, Jr. An oxidized extracellular oxidation-reduction state increases Nox1 expression and proliferation in vascular smooth muscle cells via epidermal growth factor receptor activation. *Arterioscler Thromb Vasc Biol.* 2010;30(11):2234-41. PMID: 2959123.

178. Stapleton JT, Fong S, Muerhoff AS, Bukh J and Simmonds P. The GB viruses: a Review and Proposed Re-classification as Pegiviruses. *J Gen Virol.* 2010.

179. *** Stein CS, Yancey PH, Martins I, Sigmund RD, Stokes JB and Davidson BL. Osmoregulation of ceroid neuronal lipofuscinosis type 3 in the renal medulla. *Am J Physiol Cell Physiol.* 2010;298(6):C1388-400.

180. *** Stoltz DA, Meyerholz DK, Pezzulo AA, Ramachandran S, Rogan MP, Davis GJ, Hanfland RA, Wohlford-Lenane C, Dohrn CL, Bartlett JA, Nelson GAt, Chang EH, Taft PJ, Ludwig PS, Estin M, Hornick EE, Launspach JL, Samuel M, Rokhlina T, Karp PH, Ostedgaard LS, Uc A, Starner TD, Horswill AR, Brogden KA, Prather RS, Richter SS, Shilyansky J, McCray PB, Jr., Zabner J and Welsh MJ. Cystic fibrosis pigs develop lung disease and exhibit defective bacterial eradication at birth. *Sci Transl Med.* 2010;2(29):29ra31. PMID: 2889616.

181. *** Sun X, Sui H, Fisher JT, Yan Z, Liu X, Cho HJ, Joo NS, Zhang Y, Zhou W, Yi Y, Kinyon JM, Lei-Butters DC, Griffin MA, Naumann P, Luo M, Ascher J, Wang K, Frana T, Wine JJ, Meyerholz DK and Engelhardt JF. Disease phenotype of a ferret CFTR-knockout model of cystic fibrosis. *J Clin Invest.* 2010;120(9):3149-60. PMID: 2929732.

182. Suneja M, Murry DJ, Stokes JB and Lim VS. Hormonal regulation of energy-protein homeostasis in hemodialysis patients: an anorexigenic profile that may predispose to adverse cardiovascular outcomes. *Am J Physiol Endocrinol Metab.* 2011;300(1):E55-64.

183. Tan ZY, Lu Y, Whiteis CA, Simms AE, Paton JF, Chapleau MW and Abboud FM. Chemoreceptor hypersensitivity, sympathetic excitation, and overexpression of ASIC and TASK channels before the onset of hypertension in SHR. *Circ Res.* 2010;106(3):536-45. PMID: 2846115.

184. *** Thiesse J, Namati E, Sieren JC, Smith AR, Reinhardt JM, Hoffman EA and McLennan G. Lung structure phenotype variation in inbred mouse strains revealed through in vivo micro-CT imaging. *J Appl Physiol.* 2010;109(6):1960-8.

185. *** Thompson S, Recober A, Vogel TW, Kuburas A, Owens JA, Sheffield VC, Russo AF and Stone EM. Light aversion in mice depends on nonimage-forming irradiance detection. *Behav Neurosci.* 2010;124(6):821-7.

186. Thompson S, Stasheff SF, Hernandez J, Nylen E, East JS, Kardon RH, Pinto LH, Mullins RF and Stone EM. Different inner retinal pathways mediate rod-cone input in irradiance detection for the pupillary light reflex and regulation of behavioral state in mice. *Invest Ophthalmol Vis Sci.* 2010.
187. Thompson S, Whiting RE, Kardon RH, Stone EM and Narfstrom K. Effects of hereditary retinal degeneration due to a CEP290 mutation on the feline pupillary light reflex. *Vet Ophthalmol.* 2010;13(3):151-7.
188. Thunhorst RL, Beltz TG and Johnson AK. Drinking and arterial blood pressure responses to ANG II in young and old rats. *Am J Physiol Regul Integr Comp Physiol.* 2010;299(5):R1135-41. PMID: 2980447.
189. Trantow CM, Hedberg-Buenz A, Iwashita S, Moore SA and Anderson MG. Elevated oxidative membrane damage associated with genetic modifiers of Lyst-mutant phenotypes. *PLoS Genet.* 2010;6:e1001008. PMID: 2895641.
190. Twait E, Williard DE and Samuel I. Dominant negative p38 mitogen-activated protein kinase expression inhibits NF-kappaB activation in AR42J cells. *Pancreatol.* 2010;10(2-3):119-28. PMID: 2899148.
191. *** Ulland TK, Buchan BW, Ketterer MR, Fernandes-Alnemri T, Meyerholz DK, Apicella MA, Alnemri ES, Jones BD, Nauseef WM and Sutterwala FS. Cutting edge: mutation of *Francisella tularensis* mviN leads to increased macrophage absent in melanoma 2 inflammasome activation and a loss of virulence. *J Immunol.* 2010;185(5):2670-4. PMID: 2953561.
192. Uriu Y, Kiyonaka S, Miki T, Yagi M, Akiyama S, Mori E, Nakao A, Beedle AM, Campbell KP, Wakamori M and Mori Y. Rab3-interacting molecule gamma isoforms lacking the Rab3-binding domain induce long lasting currents but block neurotransmitter vesicle anchoring in voltage-dependent P/Q-type Ca²⁺ channels. *J Biol Chem.* 2010;285(28):21750-67. PMID: 2898395.
193. Van Natta TL, Parekh KR, Dearmond DT and Iannettoni MD. Damage control: cavoatrial anastomosis during a catastrophic right intrapericardial pneumonectomy. *Tex Heart Inst J.* 2010;37(5):587-90. PMID: 2953238.
194. Van Otterloo E, Li W, Bonde G, Day KM, Hsu MY and Cornell RA. Differentiation of zebrafish melanophores depends on transcription factors AP2 alpha and AP2 epsilon. *PLoS Genet.* 2010;6(9). PMID: 2940735.
195. Vassilopoulos S, Oddoux S, Groh S, Cacheux M, Faure J, Brocard J, Campbell KP and Marty I. Caveolin 3 is associated with the calcium release complex and is modified via in vivo triadin modification. *Biochemistry.* 2010;49(29):6130-5. PMID: 2907096.
196. Vogtlander NP, van der Vlag J, Bakker MA, Dijkman HB, Wevers RA, Campbell KP, Wetzels JF and Berden JH. Expression of sialidase and dystroglycan in human glomerular diseases. *Nephrol Dial Transplant.* 2010;25(2):478-84.
197. Volk KA, Roghair RD, Jung F, Scholz TD, Lamb FS and Segar JL. Coronary endothelial function and vascular smooth muscle proliferation are programmed by early-gestation dexamethasone exposure in sheep. *Am J Physiol Regul Integr Comp Physiol.* 2010;298(6):R1607-14. PMID: 2886704.
198. Wakisaka Y, Chu Y, Miller JD, Rosenberg GA and Heistad DD. Critical role for copper/zinc-superoxide dismutase in preventing spontaneous intracerebral hemorrhage during acute and chronic hypertension in mice. *Stroke.* 2010;41(4):790-7. PMID: 2847648.
199. Wakisaka Y, Chu Y, Miller JD, Rosenberg GA and Heistad DD. Spontaneous intracerebral hemorrhage during acute and chronic hypertension in mice. *J Cereb Blood Flow Metab.* 2010;30(1):56-69. PMID: 2888049.

200. Walder RY, Rasmussen LA, Rainier JD, Light AR, Wemmie JA and Sluka KA. ASIC1 and ASIC3 play different roles in the development of Hyperalgesia after inflammatory muscle injury. *J Pain*. 2010;11(3):210-8. PMID: 2943154.
201. Walia S, Fishman GA, Jacobson SG, Aleman TS, Koenekoop RK, Traboulsi EI, Weleber RG, Pennesi ME, Heon E, Drack A, Lam BL, Allikmets R and Stone EM. Visual acuity in patients with Leber's congenital amaurosis and early childhood-onset retinitis pigmentosa. *Ophthalmology*. 2010;117(6):1190-8.
202. Wang R, Urso ML, Zambraski EJ, Rader EP, Campbell KP and Liang BT. Adenosine A(3) receptor stimulation induces protection of skeletal muscle from eccentric exercise-mediated injury. *Am J Physiol Regul Integr Comp Physiol*. 2010;299(1):R259-67. PMID: 2904144.
203. Washko GR, Martinez FJ, Hoffman EA, Loring SH, Estepar RS, Diaz AA, Sciruba FC, Silverman EK, Han MK, Decamp M and Reilly JJ. Physiological and computed tomographic predictors of outcome from lung volume reduction surgery. *Am J Respir Crit Care Med*. 2010;181(5):494-500. PMID: 2830400.
204. Watanabe H, Yamashita T, Saitoh N, Kiyonaka S, Iwamatsu A, Campbell KP, Mori Y and Takahashi T. Involvement of Ca²⁺ channel synprint site in synaptic vesicle endocytosis. *J Neurosci*. 2010;30(2):655-60.
205. Weiss RM, Kerber RE, Jones JK, Stephan CM, Trout CJ, Lindower PD, Staffey KS, Campbell KP and Mathews KD. Exercise-induced left ventricular systolic dysfunction in women heterozygous for dystrophinopathy. *J Am Soc Echocardiogr*. 2010;23(8):848-53.
206. Welsh MJ. Targeting the basic defect in cystic fibrosis. *N Engl J Med*. 2010;363(21):2056-7.
207. Wen H, Kim N, Fuentes EJ, Mallinger A, Gonzalez-Alegre P and Glenn K. FBG1 is a promiscuous ubiquitin ligase that sequesters APC2 and causes S-phase arrest. *Cell Cycle*. 2010;9(22):4506-17.
208. Westin ER, Aykin-Burns N, Buckingham EM, Spitz DR, Goldman FD and Klingelutz AJ. The p53/p21^{WAF/CIP} Pathway Mediates Oxidative Stress and Senescence in Dyskeratosis Congenita Cells with Telomerase Insufficiency. *Antioxid Redox Signal*. 2010.
209. Wier AM, Nyholm SV, Mandel MJ, Massengo-Tiasse RP, Schaefer AL, Koroleva I, Splinter-Bondurant S, Brown B, Manzella L, Snir E, Almagbrazi H, Scheetz TE, Bonaldo Mde F, Casavant TL, Soares MB, Cronan JE, Reed JL, Ruby EG and McFall-Ngai MJ. Transcriptional patterns in both host and bacterium underlie a daily rhythm of anatomical and metabolic change in a beneficial symbiosis. *Proc Natl Acad Sci U S A*. 2010;107(5):2259-64. PMID: 2836665.
210. Williard DE, Twait E, Yuan Z, Carter AB and Samuel I. Nuclear factor kappa B-dependent gene transcription in cholecystokinin- and tumor necrosis factor-alpha-stimulated isolated acinar cells is regulated by p38 mitogen-activated protein kinase. *Am J Surg*. 2010;200(2):283-90. PMID: 2910146.
211. Wine JJ. The development of lung disease in cystic fibrosis pigs. *Sci Transl Med*. 2010;2(29):29ps0.
212. Wu HJ, Seib KL, Srikhanta YN, Edwards J, Kidd SP, Maguire TL, Hamilton A, Pan KT, Hsiao HH, Yao CW, Grimmond SM, Apicella MA, McEwan AG, Wang AH and Jennings MP. Manganese regulation of virulence factors and oxidative stress resistance in *Neisseria gonorrhoeae*. *J Proteomics*. 2010;73(5):899-916.
213. Xia G, Tawhai MH, Hoffman EA and Lin CL. Airway wall stiffening increases peak wall shear stress: a fluid-structure interaction study in rigid and compliant airways. *Ann Biomed Eng*. 2010;38(5):1836-53.
214. Xu D, Borges GR, Davis DR, Agassandian K, Sequeira Lopez ML, Gomez RA, Cassell MD, Grobe JL and Sigmund CD. Neuron- or Glial-Specific Ablation of Secreted Renin Does Not Affect Renal Renin, Baseline

Arterial Pressure or Metabolism. *Physiol Genomics*. 2010.

215. Xue B, Beltz TG, Yu Y, Guo F, Gomez-Sanchez CE, Hay M and Johnson AK. Central Interactions of Aldosterone (Aldo) and Angiotensin II (ANG II) in Aldo- and ANG II-induced Hypertension. *Am J Physiol Heart Circ Physiol*. 2010.
216. Yang J, Huang J, Maity B, Gao Z, Lorca RA, Gudmundsson H, Li J, Stewart A, Swaminathan PD, Ibeawuchi SR, Shepherd A, Chen CK, Kutschke W, Mohler PJ, Mohapatra DP, Anderson ME and Fisher RA. RGS6, a modulator of parasympathetic activation in heart. *Circ Res*. 2010;107(11):1345-9. PMID: 2997524.
217. Yin Y, Choi J, Hoffman EA, Tawhai MH and Lin CL. Simulation of pulmonary air flow with a subject-specific boundary condition. *J Biomech*. 2010;43(11):2159-63.
218. Yin Y, Hoffman EA, Ding K, Reinhardt JM and Lin CL. A cubic B-spline-based hybrid registration of lung CT images for a dynamic airway geometric model with large deformation. *Phys Med Biol*. 2011;56(1):203-18.
219. Yin Y, Hoffman EA and Lin CL. Lung lobar slippage assessed with the aid of image registration. *Med Image Comput Comput Assist Interv*. 2010;13(Pt 2):578-85.
220. Yoshida-Moriguchi T, Yu L, Stalnaker SH, Davis S, Kunz S, Madson M, Oldstone MB, Schachter H, Wells L and Campbell KP. O-mannosyl phosphorylation of alpha-dystroglycan is required for laminin binding. *Science*. 2010;327(5961):88-92. PMID: 2978000.
221. Zhang S, Zhang Y, Chaloner K and Stapleton JT. A copula model for bivariate hybrid censored survival data with application to the MACS study. *Lifetime Data Anal*. 2010;16(2):231-49.
222. Zisman DA, Schwarz M, Anstrom KJ, Collard HR, Flaherty KR and Hunninghake GW. A controlled trial of sildenafil in advanced idiopathic pulmonary fibrosis. *N Engl J Med*. 2010;363(7):620-8.