

# Curriculum Vitae

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## BIOGRAPHICAL

**Name:** Donna Beer Stoltz

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**Place of Birth:** Fitchburg, MA, USA

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## EDUCATION AND TRAINING

<b>Dates attended</b>	<b>Name and Location of Institution</b>	<b>Degree/Year</b>
<b>Discipline</b>		
<b>UNDERGRADUATE</b>		
1977-1980 Biochemistry	University of New Hampshire, Durham, NH	
1984-1986 Biochemistry	University of Massachusetts, Amherst, MA	B.S. 1986 <i>summa cum laude</i>
<b>GRADUATE</b>		
1986-1991 Molecular and Cellular Biology	University of Massachusetts, Amherst MA (Mentor: Bruce S. Jacobson, Ph.D.)	Ph.D. 1991
Summer 1987 10 weeks	Marine Biological Laboratory, Woods Hole MA	Embryology
June 13-20, 2010	Quantitative Fluorescence Microscopy	Mt. Desert Island Biological Labs
<b>POST-GRADUATE</b>		
1992-1996 Pathology/Hepatology	University of Pittsburgh Medical School (Mentor: George K. Michalopoulos, M.D., Ph.D.)	Post-Doctoral

## APPOINTMENTS AND POSITIONS

<b>Years Inclusive</b>	<b>Name and Location of Institution</b>	<b>Position</b>
1996-2008	University of Pittsburgh School of Medicine Department of Pathology	Research Assistant Professor
1997- 2008	University of Pittsburgh School of Medicine Dept. Cell Biology & Physiology	Research Assistant Professor
1997-present	University of Pittsburgh School of Medicine Center for Biologic Imaging	Associate Director
1997-present	University of Pittsburgh School of Medicine Center for Biologic Imaging	Director Electron Microscopy Facility
2001-present	McGowan Institute for Regenerative Medicine	Member Faculty
2008-present	McGowan Institute of Regenerative Medicine	Executive Board
2007-present	University of Pittsburgh Cancer Institute	Member Faculty
2008-2012	University of Pittsburgh Medical School Department of Cell Biology and Physiology	Associate Professor (Primary)
2008-present	University of Pittsburgh Medical School Department of Pathology	Associate Professor (Secondary Appointment)
2012-present	University of Pittsburgh Medical School Department of Cell Biology	Associate Professor (Primary) with tenure
2012-present	University of Pittsburgh Medical School Department of Pathology	Associate Professor, with tenure (Secondary appointment)
2015-present	Vascular Medicine Institute University of Pittsburgh School of Medicine	Member Faculty

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## MEMBERSHIPS IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

American Society for Cell Biology (ASCB)	1991-present
Microscopy Society of America (MSA)	1997-present
North American Vascular Biology Association (NAVBO)	1997-present
American Society for the Study of Liver Diseases (AASLD)	1998-2012
American Society for Investigative Pathology (ASIP)	1999-present
American Physiological Society	2011-present

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## AWARDS AND HONORS

Commonwealth Scholar, University of Massachusetts, Amherst, MA	1986
Graduated <i>Summa Cum Laude</i> , University of Massachusetts, Amherst, MA	1986
American Liver Foundation Liver Scholar Award, American Liver Foundation	1997-2000
Charlotte Geyer Foundation Cancer Research Grant	1997
Olympus BioScapes honorable mention photomicrograph	2006
Nikon Small World 2 <sup>nd</sup> and 19 <sup>th</sup> place winner photomicrographs	2011
Nikon Small World Honorable Mention photomicrograph	2012
University of Pittsburgh Biomedical Graduate Student Association Distinguished Mentor Award	2012
ASCB Science as Art Show Competition, Philadelphia Airport, 2 pieces	2014
ASCB Science as Art Show Competition, Dulles Airport, Washington DC, 1 piece	2014
Nikon Small World Award, Image of Distinction.	2015

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## PUBLICATIONS

### Peer-Reviewed Articles

1. Yen-Patton, GPA, WF Patton, **DM Beer**, BS Jacobson. Endothelial cell response to pulsed electromagnetic fields: stimulation of growth rate and angiogenesis in vitro. *J. Cell. Physiol.* 134:37-46. 1988. PMID: 244715.
2. **Stolz DB** & BS Jacobson. Macro- and microvascular endothelial cells in vitro: maintenance of biochemical heterogeneity despite loss of ultrastructural characteristics. *In Vitro Cell Dev. Biol.* 27A:169-182. 1991. PMID: 2019556.
3. **Stolz, DB**, MG Mahoney, BS Jacobson. The impenetrability of 5-N-(hexadecanoyl)-aminofluorescein through endothelial cell monolayers is dependent upon its solution properties, not the presence of tight junctions. *Biochem. Biophys. Res. Comm.* 184(1):160-166. 1992. PMID: 1567423.
4. **Stolz DB** & BS Jacobson. Examination of transcellular membrane protein polarity of bovine aortic endothelial cells in vitro using the cationic colloidal silica microbead isolation procedure. *J. Cell Science* 103, 39-51. 1992. PMID: 1331135.
5. **Stolz DB**, G Bannish, BS Jacobson. The role of the cytoskeleton and intercellular junctions on the transcellular membrane Protein Polarity of Bovine Aortic Endothelial Cells In Vitro. *J. Cell Science* 103, 53-68. 1992. PMID: 1429910.
6. **Stolz DB** & GK Michalopoulos. Comparative effects of hepatocyte growth factor and epidermal growth factor on motility, morphology, mitogenesis and signal transduction of primary rat hepatocytes. *J. Cellular Biochem.* 55:445-464. 1994. PMID: 7962176
7. Jacobson BS, **Stolz DB**, Schnitzer JE. Identification of endothelial cell-surface proteins as targets for diagnosis and treatment of disease. *Nature medicine.* 1996; 2(4):482-4. PMID: 8597963.
8. Mars, WM, T-K Kim, **DB Stolz**, M-L Liu, GK Michalopoulos. The presence of urokinase in serum-free, primary rat hepatocyte cultures and its role in activating hepatocyte growth factor. *Cancer Research*, 56:2837-43. 1996. PMID: 8665523.
9. **Stolz DB** & GK Michalopoulos. Synergistic enhancement of EGF, but not HGF, stimulated hepatocyte motility by TGF- $\beta$ 1 in vitro. *J. Cell. Physiol.* 170:57-68. 1997. PMID: 901278.
10. Presnell, SC, **DB Stolz**, M Jo, WM Mars, GK Michalopoulos, SC Strom. Constitutive expression of TGF-a in rat liver epithelial cells results in modifications of the HGF/c-met pathway. *Molecular Carcinogenesis.* 18:244-255. 1997. PMID: 9142219.
11. T-H Kim, WM Mars, **DB Stolz**, BE Petersen, GK Michalopoulos. Extracellular matrix remodeling at early stages of rat liver regeneration. *Hepatology*, 26:896-904. 1997. PMID: 9328311.
12. **Stolz DB** & GK Michalopoulos. Differential Modulation of HGF stimulated motility by TGF- $\beta$ 1 on rat liver epithelial cells in vitro. *J. Cell. Physiol.* 175:30-40. 1998. PMID: 9491778
13. Shima, N, **DB Stolz**, M Miyazaki, E Gohda, K Higashio, GK Michalopoulos. Sustained induction of p21/waf1 mediates growth inhibition of HepG2 cells induced by hepatocyte growth factor. *J. Cell. Physiol.* 177:130-136. 1998. PMID: 9731753.
14. Kim, T-H, WC Bowen, **DB Stolz**, D Runge, WM Mars, GK Michalopoulos Differential expression and distribution of focal adhesion and cell adhesion molecules in rat hepatocyte differentiation. *Exp. Cell Res.* 244:93-104. 1998. PMID: 9770353.
15. LeQuerre, S, D Anderson, **DB Stolz**, J C Glorioso. Recombinant herpes simplex virus type 1 engineered for Targetted binding to the erythropoietin receptor bearing cells. *J. Virology* 72(12):9683-9697 1998. PMID: 9811702.

16. Michalopoulos GK, WC Bowen, VF Zajac, **DB Stolz**, D Runge and SC Watkins. Morphogenetic events of mixed cultures of hepatocytes and non-parenchymal cells in biological matrices. *Hepatology*, 29: 90-100. 1999. PMID: 9862855.
17. Rizzo MA, K Shome, C Vasudevan, **DB Stolz**, SC Watkins, G Romero. Phospholipase D and its product, phosphatidic acid, mediate agonist-dependent Raf-1 translocation to the plasma membrane and to endocytotic vesicles. *J Biol. Chem.* 274(2):1131-1139. 1999. PMID: 9873061.
18. Li S, W-C Tseng, **DB Stolz**, SC Watkins, L Huang. Dynamic changes in the characteristics of cationic lipidic vectors after exposure to mouse serum: implications for intravenous lipofectin. *Gene Therapy*, 6:585-594. 1999. PMID: 10476218.
19. Jessup JM, P Battle, H Waller, KH Edmiston, **DB Stolz**, SC Watkins, J Locker, K Skena. Reactive nitrogen and oxygen radicals form during hepatic ischemia-reperfusion to kill low metastatic cancer cells. *Cancer Research* 59:1825-1829. 1999. PMID: 10213485.
20. Lange RW, R Clark Lantz, **DB Stolz**, SC Watkins, P Sundaresan, R Lemus, MH Karol. Toluene diisocyanate colocalizes with tubulin on cilia of differentiated human airway epithelial cells. *Toxicological Sciences* 50:64-71. 1999. PMID: 10445754.
21. **Stolz DB**, WM Mars, BE Petersen, T-H Kim, GK Michalopoulos. Growth factor signal transduction immediately following two-thirds partial hepatectomy in the rat. *Cancer Research* 59:3954-3960. 1999. PMID: 10463591.
22. **Stolz DB**, MA Ross, HM Salem, W M Mars, GK Michalopoulos, K Enomoto. Cationic Colloidal Silica Membrane Perturbation as a Means of Examining Changes at the Sinusoidal Surface During Liver Regeneration. *Am. J. Path.* 155:1487-1498. 1999. PMID: 10550305.
23. Kim T-H, W M Mars, **DB Stolz**, GK Michalopoulos. Expression and activation of pro-MMP2 and pro-MMP9 during rat liver regeneration. *Hepatology*. 31:75-82. 2000. PMID: 10613731.
24. Nadler EP, LL Go, **D Beer-Stolz**, SC Watkins, LC Schall, P Boyle, HR Ford. Transcellular transport is not required for the transmucosal bacterial passage across the intestinal membrane ex vivo. *Surgical Infections* 1(4): 265-272. 2000. PMID: 12594882.
25. Li B, S Li, Y Tan, **DB Stolz**, SC Watkins, LH Block, L Huang. Lyophilization of cationic lipid-protamine-DNA (LPD) complexes. *J. Pharm. Sci.* 89:355-364. 2000. PMID: 10707016.
26. Runge D, DM Runge, D Jager, KA Lubecki, **DB Stolz**, S Karathanasis, T Kietzmann, SC Strom, K Jungermann, WE Fleig, GK Michalopoulos. Serum-free long-term cultures of human hepatocytes: Maintenance of cell morphology, transcription factors and liver specific functions. *Biochem. Biophys. Res. Com.* 269:46-53. 2000. PMID: 10694475.
27. Jo M, **DB Stolz**, J E Espplen, K Dorko, GK Michalopoulos, SC Strom. Cross Talk between EGFR and c-met Signal Pathways in Transformed Cells. *J. Biol. Chem.* 275:8806-8811. 2000. PMID: 10722725.
28. Runge D, C Kohler, VE Kostrubsky, D Jager, T Lehmann, DM Runge, U May, **DB Stolz**, SC Strom, WE Fleig, GK Michalopoulos. Induction of Cytochrome P450 (CYP)1A1, CYP1A2 and CYP3A4 but not CYP2C9, CYP2C19 multidrug resistance (MDR-1) and multidrug resistance associated protein (MRP-1) by prototypical inducers in human hepatocytes. *Biochem Biophys Res Com.* 273:333-341. 2000. PMID: 10873607.
29. Nadler EP, EC Dickenson, A Kniseley, X-R Zhang, P Boyle, **D Beer-Stolz**, SC Watkins, H R Ford. Expression of inducible nitric oxide synthase and interleukin-12 in experimental necrotizing enterocolitis. *J. Surg. Res.* 92:71-77. 2000. PMID: 10864485.
30. Howard M, X Jiang, **DB Stolz**, WG Hill, J Johnson, SC Watkins, RA Frizzell, C Bruton, P Robbins, OA Weisz, Forskolin-induced membrane insertion of virally-expressed, epitope-

- tagged CFTR in polarized Madin-Darby Canine Kidney Cells. Am. J. Physiol. Cell Biol. 279:C375-382. 2000. PMID: 10913004.
31. Lee PC, MR Kibbe, MJ Schuchert, **DB Stolz**, SC Watkins, BP Griffith, TR Billiar, LL Shears, II. Nitric oxide induces angiogenesis and upregulates avb3 Integrin expression on endothelial cells. Microvascular Research 60:269-280. 2000. PMID: 11078643.
  32. Rausa FM, Y Tan, H Zhou, KW Yoo, **DB Stolz**, SC Watkins, RR Franks, RH Costa. Elevated levels of HNF-3b influence mouse hepatocyte expression of genes involved in bile acid and glucose homeostasis. Mol. Cell. Biol. 20:8264-8282. 2000. PMID: 11027295.
  33. Yaroslavskiy BB, **DB Stolz**, SC Watkins, N Bradbury, SM Alber, RA Steinman. 2001. P27<sup>KIP1</sup> localizes to detergent-insoluble microdomains within lymphocyte membranes. Molecular Medicine 7:49-58. 2001. PMID: 11474127.
  34. Wack KE, MA Ross, V Zegarra, SC Watkins, **DB Stolz**. Sinusoidal ultrastructure evaluated during the revascularization of regenerating rat liver. Hepatology 33:363-378. 2001. PMID: 11172338.
  35. Beatty P, F-G Hanisch, **DB Stolz**, OJ Finn, P Ciborowski. Biochemical characterization of the soluble form of tumor antigen MUC1 isolated from sera and ascites fluid of breast and pancreatic cancer patients. Clin. Cancer Res. 7781s-787s. 2001. PMID: 11300473.
  36. Larregina AT, SC Watkins, G Erdos, LA Spencer, WJ Storkus, **DB Stolz**, LD Falo, Jr. Direct transfection of Human cutaneous dendritic cells. Gene Therapy 8:608-617. 2001. PMID: 11320407.
  37. Monga SPS, P Pediaditakis, K Mule, **DB Stolz**, GK Michalopoulos. Changes in Wnt1/catenin pathway during regulated growth in rat liver regeneration. Hepatology, 33:1098-1109. 2001. PMID: 11343237.
  38. Nadler EP, EC Dickenson, **D Beer-Stolz**, SM Alber, SC Watkins, DW Pratt and HR Ford. Scavenging nitric oxide reduces hepatocellular injury after endotoxin challenge. Am. J. Physiol. Gastrointest. Liver Physiol. 281:G173-G181. 2001. PMID: 11408270.
  39. Kalinichenko VV, L Lim, **DB Stolz**, B Shin, FM Rausa, J Clark, JA Whitsett, SC Watkins, RH Costa. Defects in pulmonary vasculature and perinatal lung hemorrhage in mice heterozygous null for the *Forkhead Box f1* transcription factor. Dev. Bio. 235:487-507. 2001: PMID: 11437453.
  40. Li H-S, BS Thompson, J-Y Zhang, X-Y Deng, PG Wood, **DB Stolz**, PK Eagon, DC Whitcomb. Cloning rat mitochondrial ATP synthase ATP5G3 gene that is induced in the pancreas with ethanol ingestion. Physiol. Genomics 6:91-98. 2001. PMID: 11459924.
  41. Runge DM, TW Stock, T Lehmann, C Taege, U Bernauer, **DB Stolz**, S Hofmann, H Foth. Expression of cytochrome P450 2E1 in normal human bronchial epithelial cells and activation by ethanol in culture. Arch Toxicol. 75(6):335-45. 2001. PMID: 11570691.
  42. Chesnay S, D Durand, J Doucet, **DB Stolz**, and L Huang. Improved DNA/Emulsion complex stabilized by poly(ethylene glycol) conjugated lipid. Pharmaceutical Research 18(10)1480-1484. 2001. PMID. 11697477.
  43. Michalopoulos GK, WC Bowen, K Mule, **DB Stolz**. Histological organization in hepatocyte organoid cultures. Am.J. Path. 159(5)1877-1887. 2001. PMID. 11696448.
  44. Ross MA, CM Sander, TB Kleeb, SC Watkins, **DB Stolz**. Spatiotemporal expression of angiogenesis growth factor receptors during the revascularization of regenerating rat liver. Hepatology. 34:1135-1148. 2001. PMID: 11732003.
  45. Schwarz NT, **D Beer-Stolz**, RL Simmons, AJ Bauer. Pathogenesis of paralytic ileus. Intestinal manipulation opens a transient pathway between the intestinal lumen and the leukocytic infiltrate of the jejunal muscularis. Ann. of Surg. 235(1):31-40. 2002. PMID: 11753040. PMC1422393.

46. Powers MJ, K Domansky, A Upadhyaya, MR Kaazempur-Mofrad, P Kurzawski, KE Wack, **DB Stolz**, R Kamm LG Griffith. A microfabricated array bioractor for perfused 3D liver culture. *Biotechnology and Bioengineering*. 78 (3):257-269. 2002. PMID: 11920442.
47. Phadke SM, V Lazarevic, CC Bahr, K Islam, **DB Stolz**, SC Watkins, SB Tencza, H Vogel, RC Montelaro, TA Mietzner. Lentivirus lytic peptide (LLP1) demonstrates membrane perturbative properties against both the outer and inner membranes of *Serretia marcescens*. *Antimicrobial Agents and Chemotherapy*, 46(6):2041-2045. 2002. PMID: 12019137. PMC127261.
48. Kalinichenko VV, Y Zhou, B Shin, **DB Stolz**, SC Watkins, JA Whitsett, RH Costa, Wild type levels of the mouse Forkhead Box f1 gene are essential for lung repair. *Am J Physiol Lung Cell Mol Physiol* 282: L1253-L1265. 2002. PMID: 12003781.
49. Chou J, **DB Stolz**, NA Burke, SC Watkins, A Wells. Distribution of gelsolin and phosphoinositol 4,5-bisphosphate in lamellipodia during EGF-induced motility. *Int. J. Biochem. Cell Biol.* 34:776-790. 2002. PMID: 11950594.
50. **Stolz DB**, R Zamora, Y Vodovotz, PA Loughan, Y-M Kim, TR Billiar, RL Simmons, SC Watkins. Peroxisomal localization of inducible nitric oxide synthase in rat hepatocytes. *Hepatology*. 36:81-93. 2002. PMID: 12085352.
51. Powers MJ, DM Janigian, KE Wack, CS Baker, **DB Stolz**, LG Griffith. Functional behavior of primary rat liver cells in a three-dimensional perfused microarray bioreactor. *Tissue Engineering*, 8(3) 513-527.2002. PMID: 12167234.
52. Beckebaum S, VR Cincinnati, G Dworacki, J Muller-Berghaus, **D Stolz**, J Harnaha, TL Whitside, AW Thomson, L Lu, JJ Fung, CA Bonham. Reduction in the circulating pDC1/pDC2 ratio and impaired function of ex vivo-generated DC1 in chronic hepatitis B infection. *Clinical Immunology*, 104(2):138-150. 2002. PMID: 12165275.
53. Ma Z, J Zhang, S Alber, J Dileo, Y Negishi, **D Stolz**, S Watkins, L Huang, B Pitt, S Li. Lipid-mediated delivery of Oligonucleotide to Pulmonary endothelium. *Am. J. Respir. Cell Mol. Biol.* 27:151-159. 2002. PMID: 12151306.
54. Drevon GF, K Danielmeier, W Federspiel, **DB Stolz**, DA Wicks, PC Yu, AJ Russell. High-activity Enzyme-polyurethane coatings. *Biotechnol Bioeng* 79: 785-794.2002. PMID: 12209801.
55. Mo F-E, AG Muntean, C-C Chen, **DB Stolz**, SC Watkins, LF Lau. Cyr61(CCN1) is essential for placental development and vascular integrity. *Mol. Cell. Biol.* 22(24):8709-8720. 2002. PMID: 12446788. PMC139880.
56. Collins JL, Y Vodovotz, C Hierholzer, RT Villavicencio, S Liu, S Alber, D Gallo, **DB Stolz**, SC Watkins, A Godfrey, W Gooding, E Kelly, AB Peitzman, TR Billiar. Characterization of the expression of inducible nitric oxide synthase in rat and human liver during hemorrhagic shock. *Shock*. 19(2):117-122. 2003. PMID: 12578118.
57. Ganta SR, NP Piesco, P Long, R Gassner, LF Motta, GD Papworth, **DB Stolz**, SC Watkins, S Agarwal, Vascularization and tissue infiltration of a biodegradable polyurethane matrix. *J Biomed Mater Res*. 64A:242-248. 2003. PMID: 12522810.
58. Ray P, Y Devaux, **DB Stolz**, M Yarlagadda, SC Watkins, W Liu, Y Lu, X-F Yang, A Ray. Inducible expression of KGF in mice inhibits lung epithelial cell death induced by hyperoxia. *PNAS* 100(10):6098-6103. 2003. PMID: 12732722. PMC156332.
59. Hughes DE, **DB Stolz**, S Yu, Y Tan, JK Reddy, SC Watkins, AM Diehl, RH Costa. Elevated hepatocyte levels of Forkhead Box A2 (HNF3b) transcription factor cause postnatal steatosis and mitochondrial damage. *Hepatology* 37:1414-1424. 2003. PMID: 12774021.
60. Nakao A, K Kimizuka, **DB Stolz**, J Seda Neto, T Kaizu, AM Choi, T Uchiyama, BS Zuckerbraun, AJ Bauer, MA Nalesnik, LE Otterbein, DA Geller, N Murase, Protective

- effect of carbon monoxide inhalation for cold-preserved small intestinal grafts. *Surgery*. 134(2):285-292. 2003. PMID: 12947331.
61. Phadke SM, K Islam, B Deslouches, SA Kapoor, **DB Stolz**, SC Watkins, RC Montelaro, JM Pilewski, TA Mietzner. Selective Toxicity of engineered lentivirus lytic peptides in a CF airway cell model. *Peptides*. 24:1009-2007. 2003. PMID: 14612179.
  62. Nakao A, K Kimizuka, **DB Stolz**, JS Neto, T Kaizu, AMK Choi, T Uchiyama, BS Zuckerbraun, MA Nelesnik, LE Otterbein, N Murase. Carbon monoxide inhalation protects rat intestinal grafts from ischemia/reperfusion injury. *Am J Path*. 163 (4): 1587-1598. 2003. PMID: 14507665. PMC1868280.
  63. Chen C, OA Weisz, **DB Stolz**, SC Watkins, RC Montelaro. Differential effects of actin cytoskeleton dynamics on equine infectious anemia virus particle production. *J. Virology* 78(2)882-891. 2004. PMID 14694119. PMC368807.
  64. Maruyama M, N Kobayashi, KA Westerman, M Sakaguchi, JE Allain, T Totsugawa, T Okitsu, A Weber, **DB Stolz**, P Leboulch, N Tanaka. Establishment of a highly differentiated immortalized human cholangiocyte cell line with SV40T and hTERT. *Transplantation* 77(3):446-451. 2004. PMID: 14966424.
  65. Zhang G, X Gao, YK Song, R Vollmer. **DB Stolz**, JZ Gasiorowski, DA Dean D Liu. Hydroporation as the mechanism of hydrodynamic delivery. *Gene Therapy* 8:675-682. 2004. PMID: 14724673.
  66. Kimizuka, K, A Nakao, MA Nalesnik, AJ Demetris, T Uchiyama, K Ruppert, MP Fink, **DB Stolz**, N Murase. Endogenous IL-6 inhibits acute inflammatory responses and prevents ischemia/reperfusion injury after intestinal transplantation. *Am J Transplantation* 4(4):482-94. 2004. PMID: 15023140.
  67. Matsumura T, M Takesue, K Westerman, T Okitsu, M Sakaguchi, T Totsugawa, M Maruyama, T Watanabe, H Noguchi, Y Kosaka, N Shibata, T Kunieda, K Omoto, S Yamamoto, P Leboulch, N Tanaka **DB Stolz**, N Kobayashi. Establishment of an immortalized human liver endothelial cell line with SV40 and hTERT. *Transplantation* 77(9):1357-1365. 2004. PMID: 15167590.
  68. Ding W-X, H-M Ni, D Defrancesco, **DB Stolz**, X-M Yin. Bid-dependent mitochondrial generation of free radicals alters mitochondrial structures and functions following death receptor activation. *Hepatology* 40(2)403-413. 2004. PMID: 15368445.
  69. Lee SB, R Koepsel, **DB Stolz**, HE Warriner, AJ Russell. Self-assembly of biocidal nanotubes from a single-chain diacetylene amine salt. *J. Am. Chem. Soc.* 126(41)13400-5. 2004. PMID: 15479096.
  70. Zhu Y, **DB Stolz**, F. Guo, MA Ross, SC Watkins, BJ Tan, RZ Qi, BH Bay, TS Teo, W Duan. Signaling via a novel integral plasma membrane pool of a serine/threonine protein kinase PRK1 in mammalian cells. *FASEB J* 18: 1722-1724. 2004. PMID: 15375078.
  71. Neto JS, Nakao, A, K Kimizuka, **DB Stolz**, AJ Romanosky, T Uchiyama, MA Nelesnik, LE Otterbein, N Murase. Carbon Monoxide inhalation protects rat kidney grafts from ischemia/reperfusion injury. *Am J Physiol: Renal Fluid & Electrolyte Physiol*. 287(5)F979-89. 2004. PMID: 15292046.
  72. Morelli AE, AT Larregina, WF Shufesky, MLG Sullivan, **DB Stolz**, GD Papworth, AF Zahorchak, AJ Logar, Z Wang, SC Watkins, LD Falo, Jr, AW Thomson. Endocytosis and intracellular sorting of exosomes by dendritic cells. Presentation of exosome derived peptides by dendritic cells in vitro and in vivo. *Blood*. 104(10)3257-3266. 2004. PMID: 15284116.
  73. Nozaki I, JG Lunz III , S Specht, **DB Stolz**, K Taguchi, VM Subbotin, N Murase, AJ Demetris, Small Proline-rich Proteins 2 are Non-coordinately Upregulated by IL-6/STAT3 Signaling after Bile Duct Ligation. *Lab Invest*. 85:109-123. 2005. PMID: 15558059.

74. Oriss TB, Ostroukhova M, Seguin-Devaux C, Dixon-McCarthy B, **Stolz DB**, Watkins SC, Pillemer B, Ray P, Ray A. Dynamics of dendritic cell phenotype and interactions with CD4+ T cells in airway inflammation and tolerance. *J Immunology* 174(2):854-863. 2005. PMID: 15634907.
75. Nakao A, JS Neto, S Kanno, **DB Stolz**, K Kimizuka, F Liu, FH Bach, T Billiar, AMK Choi, L Otterbein, N Murase. Protection against Ischemia/reperfusion injury in cardiac and renal transplantation with carbon monoxide, biliverdin or both. *Am J Transplantation* 5(2):282-291. 2005. PMID: 15643987.
76. Gkretsi V, Y Zhang, Y Tu, K Chen, **DB Stolz**, SC Watkins and C Wu. Physical and functional association of migfilin with cell-cell adhesions. *Journal of Cell Science*. 118(4):697-710. 2005. PMID: 15671069.
77. Li HS, **Stolz DB**, Romero G. Characterization of endocytic vesicles using magnetic microbeads coated with signaling ligands. *Traffic* 6(4):324-334. 2005. PMID 15752137
78. Gilbert TW, **DB Stolz**, F Biancaniello, A Simmons-Byrd, SF Badylak. Production and characterization of particulate ECM: Implications for tissue engineering applications. *Biomaterials* 12:1431-1435. 2005. PMID: 15482831.
79. Savva M, A Aljaberi, J Feig, **DB Stolz**. Correlation of the physicochemical properties of symmetric 1,3-dialkylamidopropane-based cationic lipids containing single primary and tertiary amine polar head groups with in vitro transfection activity. *Colloids Surf B Biointerfaces* 43(1):43-47. 2005. PMID: 15916888.
80. Lagoa CE, Y Vodovotz, **DB Stolz**, F Lhuillier, C McCloskey, D Gallo, R Yang, E Ustinova, MP Fink, TR Billiar, WM Mars. Contribution of Type 1 Plasminogen Activator Inhibitor (PAI-1) to Hepatic Injury during Hemorrhagic Shock. *Hepatology* 42:390-399. 2005. PMID: 16025510.
81. Kostrubsky SE, JF Sinclair, SC Strom, S Wood, E Urda, **DB Stolz**, YH Wen, S Kulkarni, A Mutlib. Phenobarbital and phenytoin increased acetaminophen hepatocytotoxicity due to inhibition of UDP-glucuronosyltransferases in cultured human hepatocytes. *Toxicol Sci*. 87(1):146-55. 2005. PMID: 15933229.
82. Ferguson BJ, **DB Stolz**. Demonstration of biofilm in human bacterial chronic rhinosinusitis. *Am J Rhinol*. 19(5):452-7. 2005. PMID: 16270598.
83. Loughran PA, **DB Stolz**, Y Vodovotz, SC Watkins, RL Simmons, TR Billiar. Monomeric iNOS localizes to peroxisomes in hepatocytes. *Proc Natl Acad Sci* 102(39):13837-42. 2005. PMID: 16172396. PMC1216830.
84. Balamurugan AN, J He, F Guo, **DB Stolz**, S Bertera, X Geng, X Ge, M Trucco, R Bottino. Harmful delayed effects of exogenous isolation enzymes on isolated human islets: relevance to clinical transplantation. *Am J Transplant*. (11):2671-81. 2005. PMID: 16212626.
85. Miki T, T Lehmann, H Cai, **DB Stolz**, SC Strom. Stem cell characteristics of amniotic epithelial cells. *Stem Cells*(10):1549-59. 2005. PMID: 16081662.
86. Sivaraman A, JK Leach, S Townsend, T Iida, BJ Hogan, **DB Stolz**, R Fry, L Samson, SR Tannenbaum, LG Griffith. A Microscale 3D Tissue Engineered Liver for Drug Development Assays. *Current Drug Metabolism*. 6(6):569-592. 2005. PMID: 16379670.
87. Smedley JG 3rd, E Jewell, J Roguskie J, Horzempa, A Syboldt, **DB Stolz**, P Castric. 2005. Influence of Pilin Glycosylation on *Pseudomonas aeruginosa* 1244 Pilus Function. *Infect Immun*. 73(12):7922-31. 2005. PMID: 16299283. PMC1307089.
88. Toyokawa H, Nakao A, **Stolz DB**, Romanosky AJ, Nalesnik MA, Neto JS, Kaizu T, Demetris AJ, Murase N. 3D-confocal structural analysis of bone marrow-derived renal tubular cells during renal ischemia/reperfusion injury. *Lab Invest*. 86(1):72-82. 2005. PMID: 16258520.

89. Neto JS, A Nakao, H Toyokawa, MA Nalesnik, AJ Romanosky, K Kimizuka, T Kaizu, N Hashimoto, O Azhipa , **DB Stoltz**, AM Choi, N Murase. Low-dose carbon monoxide inhalation prevents development of chronic allograft nephropathy. *Am J Physiol Renal Physiol.* 290(2):F324-334. 2006. PMID: 16131650.
90. ME Killeen, JA Englert, **DB Stoltz**, M Song, Y Han, RL Delude, JA Kellum and MP Fink. The phase II enzyme inducers ethacrynic acid, D,L-sulforaphane and oltipraz inhibit LPS-induced secretion by RAW 264.7 cells. *J Pharmacol Exp Ther.* 316(3):1070-1079. 2006. PMID: 16382025.
91. Brown B, K Lindberg, J Reing, **DB Stoltz**, SF Badylak. The basement membrane component of biologic scaffolds derived from extracellular matrix. *Tissue Eng.* Mar;12(3):519-26. 2006. PMID: 16579685.
92. Liu S, **DB Stoltz**, PL Sappington, CA Macias, ME Killeen, JJ Tenhunen, RL Delude, MP Fink. HMGB1 is Secreted by Immunostimulated Enterocytes and Contributes to Cytomix-induced Hyperpermeability of Caco-2 Monolayers. *Am J Physiol Cell Physiol.* 290(4)C990-999. 2005. PMID: 16282196.
93. Zhang W, S Patil, B Chauhan, S Guo, D Powell, J Le, A Klotsas, X Xiao, R Franks, K Heidenreich, MP Sajan, RV Farese, **DB Stoltz**, P Tso, S-H Koo, M Montminty, T G Unterman. FoxO1 Regulates Multiple Metabolic Pathways in the Liver: Effects on Gluconeogenic, Glycolytic and Lipogenic Gene Expression. *JBC* 281(15)10105-10117. 2006. PMID: 16492665.
94. Perone MJ, AT Larregina, WJ Shufesky, GD Papworth, ML Sullivan, AF Zahorchak, **DB Stoltz**, LG Baum, SC Watkins, AW Thomson, AE Morelli. Transgenic galectin-1 induces maturation of dendritic cells that elicit contrasting responses in naive and activated T cells. *J Immunol.* 176(12):7207-20. 2006. PMID: 16751364.
95. Shao H, J Chou, CJ Baty, NA Burke, SC Watkins, **DB Stoltz**, A Wells. Spatial localization of M-Calpain to the plasma membrane by PIP2 binding is required for EGF receptor-mediated activation. *Mol Cell Bio.* 26(11)5481-5496. 2006. PMID: 16809781.
96. Dai C, **DB Stoltz**, SI Bastacky, R St.Arnaud, C Wu, S Dedhar Y Liu. Essential role of integrin-linked kinase in podocyte biology: Bridging the integrin and slit diaphragm signaling. *J. Am Soc Nephrol* 17:2164-75 2006. PMID: 16837631.
97. Han C, AJ Demetris, **DB Stoltz**, L Xu, K Lim, T Wu. Modulation of STAT3 activation by the cPLA<sub>2</sub>a and COX-2 controlled PGE<sub>2</sub> signaling pathway. *JBC* 281(34):24831-46. 2006. PMID: 16790433.
98. Nakao A, H Toyokawa, A Tsung, MA Nalesnik, **DB Stoltz**, J Kohmoto, A Ikeda, K Tomiyama, T Harada, T Takahashi, R Yang, MP Fink, K Morita, AMK Choi, N Murase. 2006, Ex vivo application of carbon monoxide in UW solution to prevent intestinal cold ischemia/reperfusion injury. *Am J. Transplantation.* 6(10):2243-2255. 2006. PMID: 16827783.
99. Khan, Z, GK Michalopoulos, **DB Stoltz**. Peroxisomal localization of hypoxia-inducible factors and HIF regulatory hydroxylases in primary rat hepatocytes exposed to hypoxia-reoxygenation *Am J Path* 126(4):1251-1269. 2006. PMID: 17003483.
100. Tobita K, JL Liu, AM Janczewski, JP Tinney, JM Nonemaker, S Augutine, **DB Stoltz**, SG Shroff, BB Keller. Engineered early embryonic cardiac tissue (EEECT) retains proliferative and contractile properties of developing embryonic myocardium. *Am J Physiol Heart Circ Physiol.* 291:H1829-H1837. 2006. PMID: 16617136:
101. Li C, E Capan, Y Zhao, J Zhao, **D Stoltz**, SC Watkins, S Jin, and B Lu. Autophagy is induced in CD+ T Cells and important for the growth factor-withdrawal cell death. *J Immunology.* 177:5163-5168. 2006. PMID: 17015701.

102. Chen, CH, LM Kuo, Y Chang, W Wu, C Goldbach, MA Ross, **DB Stoltz**, L Chen, JJ Fung, L Lu S Qian, In vivo immune modulatory activity of hepatic stellate cells in mice. *Hepatology* 44(5):1171-1181. 2006. PMID: 17058227.
103. Suda T, X Gao, **DB Stoltz**, D Liu. Hydrodynamic injection-induced structure changes in mouse liver. *Gene Therapy* 14(2):129-137. 2007. PMID: 16988719.
104. Ito N, RA Demarco, RB Mailliard, J Han, H Rabinowich, P Kalinski, **DB Stoltz**, HJ Zeh 3<sup>rd</sup>, MT Lotze. Cytolytic cells induce HMGB1 release from melanoma cell lines. *J. Leukoc. Biol.* 81(1):75-83. 2007. PMID: 16968820.
105. Daucher, JA, KA Clark, **DB Stoltz**, LA Meyn, PA Moalli. Adaptations of the rat vagina in pregnancy to accommodate delivery. *Obstet. Gynecol.* 109(1):128-135. 2007. PMID: 17197598.
106. Straub AC, **DB Stoltz**, MA Ross, A Hernández-Zavala, NV. Soucy, LR Klei, and A Barchowsky. Arsenic Stimulates Sinusoidal Endothelial Cell Capillarization and Vessel Remodeling in Mouse Liver. *Hepatology*. 45(1):205-12. 2007. PMID: 17187425.
107. Yates C, CR Shepard, G Papworth, A Dash, **D Beer-Stoltz**, S Tannenbaum, L Griffith, A Wells. Novel three-dimensional organotypic liver bioreactor to directly visualize early events in metastatic progression. *Adv Cancer Res* 97:225-246. 2007. PMID: 17419948.
108. Ding, W-Y, H-M Ni, W Gao, Y-F Hou, MA Melan, Z Chen, **DB Stoltz**, Z-M Shao, X-M Yin. Differential effects of endoplasmic reticulum stress-induced autophagy on cell survival. *J. Biol. Chem* 282(7):4702-4710. 2007. PMID: 17135238.
109. Kim, K, Y Lei, **DB Stoltz**, D Liu. Bifunctional compounds for targeted hepatic gene delivery. *Gene Therapy* 2007. 14(8):704-708. 2007. PMID: 17287859.
110. Yates, CC, CR Shepard, **DB Stoltz**, A Wells. Co-culturing human prostate carcinoma cells with hepatocytes lead to increased expression of E-cadherin. *Br J Cancer*. 96(8):1246-1252. 2007. PMID: 17406365. PMC2360137.
111. Chen C, J Jin, M Rubin, L Huang, T Sturgeon, KM Weixel, **DB Stoltz**, SC Watkins, JR Bamburg, OA Weisz, RC Montelaro. Association of gag multimers with filamentous actin during equine infectious anemia virus assembly. *Current HIV Res.* 5(3):315-323. 2007. PMID: 17504173.
112. Leaphart, CL, F Qureshi, S Cetin, J Li, T Dubowski, C Baty, **D Beer-Stoltz**, F Guo, SA Murray, DJ Hackam. Interferon-gamma inhibits intestinal restitution by preventing gap junction communication between enterocytes. *Gastroenterology*. 132(7):2395-2411. 2007. PMID: 17570214.
113. Fujimoto, K, K Tobita, WD Merryman, J Guan, N Momoi, **DB Stoltz**, MS Sacks, BB Keller, WR Wagner. An elastic biodegradable cardiac patch induces contractile smooth muscle and improves cardiac remodeling and fiction in sub-acute myocardial infarction. *J Am College Cardiology*. 49(23):2292-2300. 2007. PMID: 17560295.
114. Anselmi, K, **DB Stoltz**, M Nalesnik, SC Watkins, R Kamath, CR Gandhi. Gliotoxin causes apoptosis and necrosis of rat Kupffer cells in vitro and in vivo in the absence of oxidative stress: exacerbation by caspase and serine protease inhibition. *J. Hepatology* 47(1):103-113. 2007. PMID: 1746640. PMC2764960.
115. Hwa, AJ, RC Fry, A Sivaraman, PT So, LD Samson, **DB Stoltz**, LG Griffith. Rat liver sinusoidal endothelial cells survive without exogenous VEGF in 3D perfused co-cultures with hepatocytes. *FASEB J* 21(10):2564-2579. 2007. PMID: 17426068.
116. Straub, AC, **DB Stoltz**, H Vin, MA Ross, NV Soucy, and A Barchowsky. Low level arsenic promotes progressive inflammatory angiogenesis and liver blood vessel remodeling in mice. *Toxicology and Applied Pharmacology*. 222(3):327-336. 2007. PMID: 17123562. PMC2084367.

117. Ding, WX, HM Ni, W Gao, T Yoshimori, **DB Stolz**, D Ron XM Yin. Linking of autophagy to ubiquitin-proteasome system is important for the regulation of endoplasmic reticulum stress and cell viability. *Am J Pathol* 171(2):513-524. 2007. PMID: 17620365. PMC1934546.
118. Sellaro, TL, AK Ravindra, **DB Stolz**, SF Badylak. Maintenance of hepatic sinusoidal endothelial cell phenotype in vitro using organ-specific extracellular matrix scaffolds. *Tissue Eng* 13(9):2301-2310. 2007. PMID: 17561801.
119. Jin X, Z Zhang, **DB Stolz**, TA Zimmers, LG Koniaris. IL-6 inhibits oxidative injury and necrosis following extreme liver resection. *Hepatology*, 46(3):802-812. 2007. PMID: 17668886.
120. Luke, CJ, SC Pak, YS Askew, TL Naviglia, DJ Askew, SM Nobar, AC Vetrica, OS Long, SC Watkins, **DB Stolz**, RJ Barstead, GL Moulder, D Bromme, GA Silverman, An Intracellular Serpin regulates necrosis by inhibiting the induction and sequelae of lysosomal injury. *Cell* 130(6) 1108-1119. 2007. PMID: 17889653.
121. Kohmoto, J, A Nakao, **DB Stolz**, T Kaizu, A Tsung, A Ikeda, H Shimizu, T Takahashi, K Tomiyama, R Sugimoto, AM Choi, TR Billiar, N Murase, KR McCurry. Carbon monoxide protects rat lung transplants from ischemia/reperfusion injury via a mechanism involving p38 MAPK Pathway. *Am J Transplant* 7(10):2279-2290. 2007. PMID: 17711551.
122. Frampton, AR Jr, **DB Stolz**, H Uchida, WF Goins, JB Cohen, JC Glorioso. Equine herpesvirus 1 enters cells by two different pathways and infection requires the activation of cellular kinase ROCK1. *J. Virol.* 81(20):10879-10889. 2007. PMID: 17670830. PMC2045510.
123. Miki, T, K Mitamura, MA Ross, **DB Stolz**, SC Strom. Identification of stem cell marker-positive cells by immunofluorescence in term human amnion. *J. Reprod Immunol* 75:91-96. 2007. PMID: 17493686.
124. Ikeda, Y, CH Fry, F Hayashi, **DB Stolz**, D Griffiths, AJ Kanai. The role of gap junctions in spontaneous activity of the rat bladder. *Am J Physiol Renal Physiol.* 293(4): F 1018-1025. 2007. PMID: 17581924. PMC3037091.
125. **Stolz, DB**, MA Ross, A Ikeda, K Tomiyama, T Kaizu, DA Geller, N Murase. Sinusoidal endothelial cell repopulation following ischemia/reperfusion injury in rat liver transplantation. *Hepatology*, 46:1464-1475. 2007. PMID: 17929236. PMC2190086.
126. Tsung, A, JR Klune, X Zhang, G Jayabalan, Z Cao, X Peng, **DB Stolz**, DA Geller, MR Roengat, TR Billiar. HMGB1 release induced by liver ischemia involves Toll-like receptor 4 dependent reactive oxygen species production and calcium-mediated signaling. *J Exp. Med* 204(12):2913-1923. 2007. PMID: 17984303. PMC2118528.
127. Anand RJ, S Dai, C Rippel, C Leaphart, F Qureshi, SC Gribar, JW Kohler, J Li, DB Stolz, C Sodhi, DJ Hackam. Activated macrophages inhibit enterocyte gap junctions via the release of nitric oxide. *Am J Physiol Gastrointest Liver Physiol* 2008. 294(1):G109-119. PMID17975131.
128. Tomiyama, K, N Murase, **DB Stolz**, H Toyokawa, DR O'Donnell, DM Smith, JR Dudas, PJ Rubin, KG Marra. Characterization of transplanted green fluorescent protein + bone marrow cells into adipose tissue. *Stem Cells*. 26(2):330-338. 2008. PMID: 17975222. PMC2268622.
129. Demetris, AJ, S Specht, I Nozaki, JG Lunz 3<sup>rd</sup>; **DB Stolz**, N Murase, T Wu. Small proline-rich proteins (SPRR) function as SH3 domain ligands, increase resistance to injury and are associated with mesenchymal transition (EMT) in cholangiocytes. *J Hepatology* 48(2):276-288. 2008. PMID: 18155796. PMC2263141.
130. Montecalvo, A, WJ Shufesky, **DB Stolz**, MG Sullivan, Z Wang, S Davis, GD Papworth, SC Watkins, PD Robbins, AT Larregina, AE Morelli. Exosomes as a short-range

- mechanism to spread alloantigen between dendritic cells during T Cell allore cognition. *J Immunology*. 180(5):3081-3090. 2008. PMID: 18292531.
131. Tan X, Yuan Y, Zeng G, Apte U, Thompson MD, Cieply B, **Stolz DB**, Michalopoulos GK, Kaestner KH, Monga SP. beta-Catenin deletion in hepatoblasts disrupts hepatic morphogenesis and survival during mouse development *Hepatology*. 47(5):1667-1679. 2008. PMID: 18393386. PMC4449338.
  132. Faleo G, JS Neto, J Kohmoto, K Tomiyama, H Shimizu, T Takahashi, Y Wang, R Sugimoto, Am Choi, **DB Stolz**, G Carrieri, KR McCurry, N Murase, A Nakao. Carbon monoxide ameliorates renal cold ischemia-reperfusion injury with an upregulation of vascular endothelial growth factor by activation of hypoxia inducible factor. *Transplantation* 85(12):1833-1840. 2008. PMID: 18580478.
  133. Cosgrove, BD, C Cheng, JR Pritchard, **DB Stolz**, DA Lauffenburger, LG Griffith. An inducible autocrine cascade regulates rat hepatocyte proliferation and apoptosis responses to tumor necrosis factor-alpha. *Hepatology*. 48(1):276-288. 2008. PMID: 18536058. PMC4327877.
  134. Han J, Hou W, Goldstein LA, Lu C, **Stolz DB**, Yin XM, Rabinowich H. Involvement of protective autophagy in TRAIL-resistance of apoptosis defective tumor cells. *J Biol Chem*. 283(28):19665-19677 2008. PMID: 18375389. PMC2443661.
  135. Gao, W, WX Ding, **DB Stolz**, XM Yin. Induction of macroautophagy by exogenously introduced calcium. *Autophagy*, 4(6):754-761. 2008. PMID 18560273. PMC2696695.
  136. Odoux, C, H Fohrer, T Hoppo, L Guzik, **DB Stolz**, DW Lewis, SM Gollin, TC Gamblin, DA Geller, E Lagasse. A stochastic model for cancer stem cells origin in metastatic colon cancer. *Cancer Res*. 68(17):6932-6941. 2008. PMID: 18757407. PMC2562348.
  137. Li-Korotky HS, JM Banks, CY Lo, FR Zeng, **DB Stolz**, JD Swarts, WJ Doyle. Interaction of pneumococcal phase variation and middle ear pressure/gas composition: An in vitro model of simulated otitis media. *Microb. Pathog* 45(3):201-206. 2008. PMID: 18619763. PMC2604118.
  138. Chen Z-H, HP Kim, FC Sciurba, S-J Lee, C Feghali-Bostwick, **DB Stolz**, R Dhir, RJ Landreneau, MJ Schuchert, SA Yousem, K Nakahira, JM Pilewski, JS Lee, Y Zhang, SW Ryter, AMK Choi. Egr-1 regulates autophagy in cigarette smoke-induced chronic obstructive pulmonary disease. *PLoS ONE* 3(10):e3316.2008. PMID: 18830406. PMC2552992.
  139. Tomiyama, K, A Ikeda, S Ueki, A Nakao, **DB Stolz**, Y Koike, A Afrazi, C Gandhi, D Tokida, DA Geller, N Murase. Inhibition of Kupffer cell-mediated early pro-inflammatory response with carbon monoxide in transplant-induced hepatic ischemia/reperfusion injury in rats. *Hepatology* 48(5):1608-1620. 2008. PMID: 18972563.
  140. Straub, AC, KA Clark, MA Ross, AG Chandra. S Li, X Gao, PJ Pagano, **DB Stolz**, A Barchowsky. Arsenic-stimulated liver sinusoid capillarization in mice requires NADPH oxidase-generated superoxide. *J. Clinical Invest*. 118(12):3980-3989. 2008. PMID: 19033667. PMC2582440.
  141. Ullrich, A, DB Stolz, EC Ellis, SC Strom, GK Michalopoulos, JG Hengstler, D Runge. Long term cultures of primary human hepatocytes as an alternative to drug testing in animals. *ALTEX* 26(4):295-302 2009. PMID: 20383495.
  142. Konduru NV, Tyurina YY, Feng W, Basova LV, Belikova NA, Bayir H, Clark K, Rubin M, **Stolz D**, Vallhov H, Scheynius A, Witasp E, Fadeel B, Kichambare PD, Star A, Kisin ER, Murray AR, Shvedova AA, Kagan VE. Phosphatidylserine targets single-walled carbon nanotubes to professional phagocytes in vitro and in vivo. *PLoS ONE* 4(2):e4398. 2009. PMID: 19198650. PMC2634966.

143. Stoltz DB. Hana no Hana: Artist's statement. Academic Medicine. 2009; 84(2):198. PMID: 19174664.
144. Zhang, SX, JJ Miller, **DB Stoltz**, LD Serpero, W Zhao, D Gozal, Y Wang. Type I epithelial cells are the main target of whole body hypoxic preconditioning in the lung. Am J Respir Cell Mol Biol. 40(3):332-339. 2009. PMID: 18776132. PMC2645531.
145. Metukuri, MR, **D Beer-Stoltz**, RA Namas, R Dhupar, A Torres, PA Loughran, BS Jefferson, A Tsung, TR Billiar, Y Vodovotz, R Zamora. Expression and subcellular localization of BNIP3 in hypoxic hepatocytes and liver stress. Am J Physiol Gastrointest Liver Physiol. 296(3):G499-509. 2009. PMID: 19147804. PMC2660177.
146. Straub, AC, LR Klei, **DB Stoltz**, A Barchowsky. Arsenic requires sphingosine-1-phosphate type 1 receptors to induce angiogenic genes and endothelial cell remodeling. Am J. Path. 174(5):1949-1958. 2009. PMID: 19349368. PMC1671282.
147. Tumne, A, VS Prasad, Y Chen, **DB Stoltz**, K Saha, DM Ratner, M Ding, SC Watkins, P Gupta. Nontoxic suppression of HIV-1 transcription on exosomes secreted by CD8+ T cells. J Virol. 83(9):4354-4364. 2009 PMID 19193788. PMC2668436.
148. Izumi, M, BJ Pazin, CF Minervini, J Gerlach, MA Ross, **DB Stoltz**, ME Turner, TL Thompson, T Miki. Quantitative comparison of stem cell marker-positive cells in fetal and term human amnion. J Repro Immunol. 81(1):39-43.2009. PMID: 19501410
149. Ding, WX, HM Ni, W Gao, X Chen, JH Kang, **DB Stoltz**, J Liu, XM Yin. Oncogenic transformation confers a selective susceptibility to the combined suppression of the proteasome and autophagy. Mol Cancer Ther. 8(7):2036-45. 2009. PMID: 19584239. PMC2711219.
150. Li, Y, X Tan, C Dai, **DB Stoltz**, D Wang, Y Liu. Inhibition of integrin-linked kinase attenuates renal interstitial fibrosis. J Am Soc Nephrol. 20(9):1907-1918. 2009. PMID: 19541809. PMC2736781.
151. Dai, C, **DB Stoltz**, LP Kiss, SP Monga, LB Holzman, Y Liu. Wnt/beta-catinen signaling promotes podocyte dysfunction and albuminuria. J Am Soc Nephrol. 20(9):1997-2008. 2009. PMID: 19628668. PMC2736766.
152. Liang, X, AR Chavez, NE Schapiro, P Loughran, SH Thorne, AA Amoscato, HJ Zeh, **D Beer-Stoltz**, MT Lotze, ME DeVera. Ethyl pyruvate administration inhibits hepatic tumor growth. J Leukoc Biol 86(3):599-607. 2009. PMID: 19584311
153. Dave', SH, JS Tilstra, K Matuoka, F Li, RA DeMarco, **D Beer-Stoltz**, AR Sepulveda, MP Fink, MT Lotze, SE Plevy. Ethyl pyruvate decreases HMGB1 release and ameliorates murine colitis. J Leukoc Biol 86(3):633-643. 2009. PMID: 19454652. PMC2735284.
154. Lotfi R, GI Herzog, RA DeMarco, **D Beer-Stoltz**, JJ Lee, A Rubartelli, H Schrezenmeier, MT Lotze. Eosinophils oxidize damage-associated molecular pattern molecules derived from stressed cells. J Immunol. 183(8):5023-31. 2009. PMID: 19794066.
155. Ikeda A, S Ueki, A Nakao, K Tomiyama, MA Ross, **DB Stoltz**, DA Geller, N Murase. Liver Graft exposure to carbon monoxide during cold storage protects sinusoidal endothelial cells and ameliorates reperfusion injury in rats. Liver Transpl 15(11):1458-1468. 2009. PMID: 19877256. PMC2930486.
156. Brown, BN, CA Barnes, RT Kasick, R Michel, TW Gilbert, **D Beer-Stoltz**, DG Castner, BD Ratner, SF Badylak. Surface characterization of extracellular matrix scaffolds. Biomaterials 31(3):428-37. 2010. PMID: 19828192. PMC2783670.
157. Gao, W, JH Kang, Y Liao, WX Ding, AA Gambatto, SC Watkins, YJ Liu, **DB Stoltz**, XM Yin. Biochemical isolation and characterization of the tubulovesicular LC3-positive autophagosomal compartment. J Biol Chem 285(2):1371-1383. 2010. PMID: 19910472. PMC2801263.

158. Houghton, AM, DM Rzymkiewicz, H Ji, AD Gregory, EE Egea, HE Metz, **DB Stoltz**, SR Land, LA Marconcini, CR Klement, KM Jenkins, KA Beaulieu, M Mouded, SJ Frank, KK Wong, SD Shapiro. Neutrophil elastase-mediated degradation of IRS-1 accelerates lung tumor growth. *Nature Med.* 16(2):219-223. 2010. PMID: 20081861. PMC2821801.
159. Yoshida J, KS Ozaki, MA Nalesnik, S Ueki, M Castillo-Rama, G Faleo, M Ezzelareb, A Nakao, B Ekser, GJ Echeverri, MA Ross, **DB Stoltz**, N Murase. Ex vivo application of carbon monoxide in UW solution prevents transplant-induced renal ischemia/reperfusion injury in pigs. *Am J Transplant.* 10(4):763-72. 2010. PMID: 20199500. PMC2886983.
160. Remlinger, NT, CA Czajka, ME Juhas, DA Vorp, **DB Stoltz**, SF Badylak, S Gilbert, TW Gilbert. Hydrated xenogeneic decellularized tracheal matrix as a scaffold for tracheal reconstruction. *Biomaterials* 31(13):3520-3526. 2010. PMID: 20144481
161. Kagan, VE, NV Konduru, W Feng, BL Allen, J Conroy, Y Volkov, II Vlasova, NA Belikova, N Yanamala, A Kapralov, YY Tyurina, J Shi, ER Kisim, AR Murray, J Franks, **D Stoltz**, P Gou, J Klein-Seetharaman, B Fadeel, A Star, AA Shvedova. Carbon nanotubes degraded by neutrophil myeloperoxidase induce less pulmonary inflammation. *Nat Nanotechnol.* 5(5):354-9. 2010. PMID: 20364135.
162. Polk, AA, TM Maul, DT McKeel, TA Snyder, CA Lehocky, B Pitt, **DB Stoltz**, WJ Federspiel, WR Wagner. A biohybrid artificial lung prototypes with active mixing of endothelialized microporous hollow fibers. *Biotechnol Bioeng.* 106(3) 490-500. 2010. PMID: 20091735. PMC4136649.
163. Lee S, CS Huang, T Kawamura, N Shigemura, **DB Stoltz**, TR Billiar, JD Luketich, A Nakao, Y Toyoda. Superior myocardial preservation with HTK solution over Celsior in rat hearts with prolonged cold ischemia. *Surgery* 148(2):463-473. 2010. PMID: 20627336.
164. Ye S, K Cihil, **DB Stoltz**, JM Pilewski, BA Stanton, A Swiatecka-Urban. C-Cbl facilitates endocytosis and lysosomal degradation of cystic fibrosis transmembrane conductance regulator in human airway epithelial cells. *J Biol Chem* 285(35):27008-27018. 2010. PMID: 20525683. PMC2930700.
165. Ding, WX, HM Ni, M Li, Y Liao, X Chen, **DB Stoltz**, GW Dorn Li, XM Yin. Nix is critical to two distinct phases of autophagy: reactive oxygen species (ROS)-mediated autophagy induction and Parkin-ubiquitin-p62-mediated mitochondria priming. *J Bio Chem* 285(36):27879-90. 2010. PMID: 20573959. PMC2934655.
166. Yeh, TH, L Krauland, V Singh, B Zou, P Devaraj, **DB Stoltz**, J Franks, SP Monga, E Sasatomi, J Behari. Liver-specific beta-catenin knockout mice have bile canalicular abnormalities, bile secretory defect and intrahepatic cholestasis. *Hepatology*. 52(4):1410-1419. 2010. PMID: 20722001. PMC2947599.
167. Orlichenko LS, J Bahari, TH Yeh, S Liu, **DB Stoltz**, SK Saluja, VP Singh. Transcriptional regulation of CXC-ELR Chemokines KC and MIP-2 in mouse pancreatic acini. *Am J Physiol Gastrointest Liver Physiol.* 299(4):G867-876. 2010. PM: 20671197. PMC2957341.
168. Leloup, L, H Shao, YH Bae, B Deasy, **D Stoltz**, P Roy, A Wells. M-calpain activation is regulated by its membrane localization and by its binding to PIP2. *J Biol Chem* 285(43):33549-33566. 2011. PMID: 20729206. PMC2963356.
169. Ding, WX, Li M, X Chen, HM Ni, CW Lin, W Gao, B Lu, **DB Stoltz**, DL Clemens, XM Yin. Autophagy reduces acute ethanol-induced hepatotoxicity and steatosis in mice. *Gastroenterology* 2010. 139(5):1740-1752. 2010. PMID: 20659474. PMC4129642.
170. Turner, NJ, AJ Yates, Jr., DJ Weber, IR Qureshi, **DB Stoltz**, TW Gilbert, SF Badylak. Xenogenic extracellular matrix as an inductive niche for regeneration of a functioning musculotendinous junction. *Tissue Engineering, Part A.* 16(11):3309-3317. 2010. PMID: 20528669.

171. Sajithlal, GB, TF McGuire, J Lu, **D Beer-Stoltz**, EV Prochownik. Endothelial cell-like cells derived directly from human tumor xenographs. *Int J Cancer* 127(10):2268-78. 2010. PMID: 20162569
172. Feng H, HJ Kwun, X Liu, O Gjoerup, **DB Stoltz**, Y Chang, PS Moore. Cellular and viral factors regulating Merkel cell polyomavirus replication. *PLoS One* 6(7): e22468. 2011. PMID: 21799863. PMC3142164.
173. Zhao, Y, NS Mangalmurti, Z Xiong, B Prakash, F Guo, **DB Stoltz**, JS Lee. Duffy antigen receptor mediates chemokine endocytosis though a macropinocytosis-like process in endothelial cells. *PLoS One* 6(12):e29624. 2011 PMID: 22216333. PMC3246497.
174. Hoppo, T, J Komori, R Manohar, **DB Stoltz**, E Lagasse. Rescue of lethal hepatic failure by Lymph nodes in mice. *Gastroenterology*. 140(2):656-666. 2011. PMID: 21070777. PMC3031768.
175. Nakao, A, CS Huang, **DB Stoltz**, Y Wang, JM Franks, N Tochigi, TR Billiar, Y Toyoda, E Tseng, KR McCurry. Ex vivo carbon monoxide delivery inhibits intimal hyperplasia in arterialized vein grafts. *Cardovasc Res*. 89(2):457-63. 2011. PMID: 20851811. PMC3022131.
176. Lee, KW, **DB Stoltz**, Y Wang. Substantial expression of mature elastin in arterial constructs. *PNAS* 108(7):2705-2010. 2011. PMID: 21282618. PMC3041142.
177. Liang, PH, F Tian, Y Lu, B Duan, **DB Stoltz**, LY Li. Vascular endothelial growth inhibitor(VEGI: TNFSF15) inhibits bone marrow-derived endothelial progenitor cell incorporation into Lewis lung carcinoma tumors. *Angiogenesis* 14(1):61-8. 2011. PMID: 21188501. PMC3042043.
178. Xiong, Z, J Cavaretta, L Qu, **DB Stoltz**, D Triulzi, JS Lee. Red blood cell microparticles show altered inflammatory chemokine binding and release upon interaction with platelets. *Transfusion*. 51(3): 610-621. 2011. PMID: 20738825. PMC3963470.
179. Yamaguchi Y, H Yasuoka, **DB Stoltz**, CA Feghali-Bostwick, Decreased Caveolin-1 levels contribute to fibrosis and deposition of extracellular IGFBP-5. *J Cell Mol Med*. 15(4):957-69. 2011. PMID: 20345844. PMC2995014.
180. Wilson, ME, N Kota, Y Kim, Y Wang, **DB Stoltz**, PR LeDuc, OB Ozdoganlar. Fabrication and circular microfluidic channels by combining mechanical micromilling and soft lithography. *Lab Chip* 11(8):1550-1555. 2011. PMID: 221399830.
181. Li H, P Wang, Q Sun, WX Ding, XM Yin, RW Sobol, **DB Stoltz**, J Yu, J Zhang. Following cytochrome c release, autophagy is inhibited during chemotherapy-induced apoptosis by caspase 8-mediated cleavage of Beclin 1. *Cancer Res*. 71(10):3625-3634. 2011. PMID: 21444671. PMC3096685.
182. Bai Q, M Sun, **DB Stoltz**, EA Burton. Major isoform of zebrafish P0 is a 23.5 kDa myelin glycoprotein expressed in selected white matter tracts of the central nervous system. *J Comp. Neurol.* 519(8):1580-1596. 2011. PMID: 21452240. PMC3903511.
183. Shields, KJ, **D Stoltz**, SC Watkins, JM Ahearn. Complement proteins C3 and C4 bind to collagen and elastin in the vascular wall: a potential role in vascular stiffness and atherosclerosis. *Clin Transl Sci* 4(3):146-152. 2011. PMID: 21707943.
184. Soto-Gutierrez, A, L Zhang, C Medberry, K Fukumitsu, D Faulk, H Jiang, J Reing, R Gramignoli, J Komori, M Ross, M Nagaya, E Lagasse, **D Stoltz**, SC Strom, IJ Fox, SF Badylak. A whole-organ regenerative medicine approach for liver replacement. *Tissue Eng Part C Methods*. 17(6):677-686. 2011. PMID: 21375407. PMC3103054.
185. Park BH, SB Lee, **DB Stoltz**, YJ Lee, BC Lee. Synergistic interactions between heregulin and PPAR gamma agonist in breast cancer cells. *J Biol Chem*. 286(22):20087-20099. 2011. PMID: 21467033. PMC3103381.

186. Ueki S, A Castellaneta, O Yoshida, K Ozaki, M Zhang, S Kimura, K Isse, M Ross, L Shao, **DB Stoltz**, AW Thomson, AJ Demetris, DA Geller, N Murase. Hepatic B7-H1 expression is essential to control cold ischemia/reperfusion injury after mouse liver transplantation. *Hepatology*. 54(1):216-228. 2011. PMID: 21503939. PMC3125416.
187. Horzempa J, DM O'Dee, **DB Stoltz**, JM Franks, D Clay, GJ Nau. Invasion of erythrocytes by *Fracisella tularensis*. *J Infect Dis* 204(1):51-59. 2011. PMID: 21628658. PMC3105038.
188. Fischer RT, HR Turnquist, Z Wang, **D Beer-Stoltz**, AW Thomson. Rapamycin-conditioned, alloantigen-pulsed myeloid dendritic cells present donor MHC class I peptide via the semi-direct pathway and inhibit survival of antigen-specific CD8(+) T cells in vitro and in vivo. *Transpl Immunol* 25(1):20-26. 2011. PMID: 21596137. PMC3128670
189. Thomson, AW, DA Geller, C Gandhi, N Murase, AJ Demetris, **D Beer-Stoltz**. Hepatic antigen-presenting cells and regulation of liver transplant outcome. *Immunol Res* 50(2-3):221-227. 2011 PMID 21717072
190. Goss JR, **DB Stoltz**, AR Robinson, M Zhang, N Arbusas, PD Robbins, JC Glorioso, LJ Niedernhofer. Premature aging-related peripheral neuropathy in a mouse model of progeria. *Mech Ageing Dev*, 132(8-9):437-442. 2011. PMID: 21596054. PMC3179831.
191. Flint MS, RA Budiu, PN Teng, M Sun, **DB Stoltz**, BL Hood, AM Vlad, TP Conrads. Restraint stress and stress hormones significantly impact T lymphocyte migration and function through specific alterations of the actin cytoskeleton. *Brain Behav Immun*. 25(6):1187-1196. 2011. PMID 21426930.
192. Eum HA, R Vallabhaneni, Y Wang, PA Loughran, **D Beer Stoltz**, TR Billiar. Characterization of DISC formation and TNFR1 translocation to mitochondria in TNF-a-treated hepatocytes. *Am J Pathol* 179(3):1221-1229. 2011. PMID: 21741934. PMC3157172
193. Feng R, S Li, C Lu, C Andreas, **D Beer-Stoltz**, MY Mapara, S Lentzsch. Targeting the microtubular network as a new anti-myeloma strategy. *Mol Cancer Ther* 10(10): 1886-1896. 2011. PMID: 21825007
194. Ghonem, N, J Yoshida, **DB Stoltz**, A Humar, TE Starzl N Murase, R Venkataramanan. Treprostinil, a prostacyclin analogue, ameliorates ischemia-reperfusion injury of rat orthotopic liver transplantation. *Am J Transplantation*. 11(11):2508-12. 2011. PMID: 21668631
195. Manohar R, J Komori, L Guzik, **DB Stoltz**, UR Chandran, WA Laframboise, E Lagasse. Identification and expansion of a unique stem cell population from adult mouse gallbladder. *Hepatology* 54(5):1830-1841. 2011. PMID: 21703193. PMC3205206.
196. Turnquist HR, Z Zhao, BR Roseborough, Q Liu, A Castellanata, K Isse, Z Wang, M Lang, **D Beer Stoltz**, XX Zheng, AJ Demetris, FY Liew, KJ Wood, AW Thomson. IL-33 expands suppressive DC11b+Gr-int and regulatory T cells including ST2L+Foxp3+ cells and mediates regulatory T cell-dependent promotion of cardiac allograft survival. *J Immunol* 187(9):4598-4610. 2011. PMID: 21949025. PMC3197898.
197. Lee, LY, T Kaizu, H Toyokawa, M Zhang, M Ross, **DB Stoltz**, C Huang, C Gandhi, DA Geller, N Murase. Carbon monoxide induces hypothermia tolerance in kupffer cells and attenuates liver ischemia/reperfusion injury in rats. *Liver Transpl*. 17(12):1457-1466. 2011. PMID: 21850691. PMC3222745.
198. Wickline, ED, PK Awuah, J Behari, M Ross, **DB Stoltz**, SP Monga. Hepatocyte gamma-catenin compensates for conditionally deleted beta-catenin at adherens junctions. *J Hepatology* 55(6):1256-1262. 2011. PMID: 21703193.
199. Bernard ME, H Kim, MS Rajagopalan B Stone, U Salimi, JC Rwigema, MW Epperly, H Shen, JP Goff, D Franicola, T Dixon, S Cao, X Zhang, H Wang, **DB Stoltz**, JS

- Greenberger. Repopulation of the irradiation damaged lung with bone marrow-derived cells. *In Vivo*. 26(1):9-18. 2012. PMID: 22210711. PMC3312241.
200. Ekser, B, E Klein, J He, **DB Stolz**, GJ Echeverri, C Long, CC Lin, M Ezzelarab, H Hara, M Veroux, D Ayares, DKC Cooper, B Gridelli. Genetically-engineered pig-to-baboon liver xenotransplantation: Histopathology of xenographs and native organs. *PLoS ONE* 7(1):e29720. 2012. PMID: 22247784. PMC3256162.
201. Jaffe M, C Sesti, IM Washington, L Du, N Dronadula, MT Chin, **DB Stolz**, EC Davis, DA Dichek. Transforming growth factor-beta signaling in myogenic cells regulated vascular morphogenesis, differentiation and matrix synthesis. *Arterioscler Thromb Vasc Biol*. 32(1):e1-e11. 2012. PMID: 21979435.
202. Graves, JA Y Wang, S Sims-Lucas, E Cherok, K Rothermund, MF Branca, J Elster, **D Beer-Stolz**, B Van Houten, J Vockley, EV Prochownik. Mitochondrial structure, function and dynamics are temporally controlled by c-Myc. *PLoS One* 7(5):e37699. 2012. PMID: 22629444. PMC3357432
203. Rodrigues, M, O Turner, **D Stolz**, L Griffith, A Wells. Production of reactive oxygen species by multipotent stromal cells/mesenchymal stem cells upon exposure to Fas Ligand. *Cell Transplantation*, 2012 21(10):2171-2187. 2012. PMID: 22526333. PMC3876879.
204. Montecalvo A, AT Larregina, WJ Shufesky, **D Beer Stolz**, Sullivan, JM Karlsson, CJ Baty, GA Gibson, G Erdos, Z Wang J Milosevic, OA Tkacheva, SJ Divito, R Jordan, J Lyons-Weller, SC Watkins, AE Morelli. Mechanism of transfer of functional microRNAs between mouse dendritic cells via exosomes. *Blood*. 119(3):756-766. 2012. PMID: 22031862. PMC3265200.
205. Li P, Q Du, Z Cao, Z Guo, J Evankovich, W Yan, Y Chang, L Shao, **DB Stolz**, A Tsung, DA Geller. Interferon-gamma induces autophagy with growth inhibition and cell death in human hepatocellular carcinoma (HCC) cells through interferon-regulatory factor-1 (IRF-1). *Cancer Lett*.314(2):213-222. 2011. PMID: 22056812. PMC3487386.
206. Hang TC, Lauffenburger, LG Griffith and **DB Stolz**. Lipids promote survival, proliferation, and maintenance of differentiation of rat liver sinusoidal endothelial cells in vitro. *Am J Physiol Gastrointestinal Liver Physiol* 302(3):G375-388. 2012. PMID: 22075778. PMC3278397.
207. Gregg SQ, V Gutierrez, AR Robinson, T Woodell, A Nakao, MA Ross, GK Michalopoulos, L Rigatti, CE Rothermel, I Kamileri, George Garinis, **D Beer Stolz**, LJ Niedernhofer. A mouse model of accelerated liver aging due to a defect in DNA repair. *Hepatology*, 55(2):609-621. 2012. PMID: 21953681. PMC3250572.
208. Rapireddy S, L Nhon, RE Meehan, J Franks, **DB Stolz**, D Tran, ME Selsted, DH Ly. RTD-1 mimic containing yPNA scaffold exhibits broad spectrum antibacterial activities. *J Am Chem Soc*. 134(9):4041-4044. 2012. PMID: 22332599.
209. Ikenouchi, J, M Suzuki, K Umeda, K Ikeda, R Taguchi, T Kobayashi, **DB Stolz**, M Umeda. Lipid polarity is maintained in the absence of tight junctions, *J Biol Chem*. 287(12):9525-9533. 2012. PMID: 22294698. PMC3308754.
210. Ji, J, YY Tyurina, M Tang, W Feng, **DB Stolz**, R Clark, D Meaney, PM Kochanek, VE Kagan, H Bayir. Mitochondrial injury after mechanical stretch of cortical neurons in vitro: Biomarkers of apoptosis and selective peroxidation on anionic phospholipids. *J Neurotrauma*. 29(5):776-788. 2011. PMID: 21895519. PMC3221911.
211. Sun, Q, T Kawamura, K Masutani, X Peng, Q Sun, **DB Stolz**, JP Pribis, TR Billiar, X Sun, CA Bermudez, Y Toyoda, A Nakao. Oral intake of hydrogen-rich water inhibits intimal hyperplasia in arterialized vein grafts in rats. *Cardiovasc Res*. 94(1):144-153. 2012. PMID: 22287575. PMC3307379.

212. Tanaka A, Y Jin, SJ Lee, M Zhang, HP Kim, **DB Stolz**, SW Ryter, AM Choi. Hyperoxia induced LC3B interacts with the Fas apoptotic pathway in epithelial cell death. *Am J Respir Cell Mol Biol* 46(4):507-14. 2012. PMID: 22095627. PMC3359946.
213. Dangi, A. TL Sumpter, S Kimura, **DB Stolz**, N Murase, G Raimondi, Y Vodovotz, C Huang, AW Thomson, CR Gandhi. Selective expansion of allogeneic regulatory T-cells by hepatic stellate cells: role of endotoxin and implications for allograft tolerance. *J Immunology* 188(8):3667-77. 2012. PMID 22427640. PMC3328102.
214. Cihil KM, P Ellinger, A Fellows, **D Beer Stolz**, DR Madden, Swiatecka-Urban, A. DAB2 facilitates AP-2 independent recruitment of CFTR to endocytic vesicles in polarized human airway epithelial cells. *J Biol Chem* 287(18):15087-99. 2012. PMID: 22399289. PMC3340432.
215. Ozaki KS, S Kimura, MA Nalesnik, RM Sico. M Zhang, S Ueki, MA Ross, **DB Stolz**, N Murase. Loss of renal dendritic cells and activation of host adaptive immunity are long-term effects of ischemia/reperfusion injury following syngeneic kidney transplantation. *Kidney Int*. 2012. PMID: 22278023. PMC3340432.
216. Liu L, GR Yannam, T Nishikawa, T Yamamoto, H Basma, R Ito, M Nagaya, J Dutta-Muscato, **DB Stolz**, F Duan, KH Kaestner, Y Vodovotz, A Soto-Gutierrez, IJ Fox. The microenvironment in hepatocyte regeneration and function in rats with advanced cirrhosis. *Hepatology* 55(5):1529-29. 2012. PMID: 22109844. PMC3700584.
217. Liang X, ME de Vera, WJ Buscher, A Romo de Vivar Chavez, P Loughran, **D Beer-Stolz**, P Basse, T Wang, B van Houten, HJ Zeh, M Lotze. Inhibiting autophagy during interleukin 2 immunotherapy promotes long-term tumor regression. *Cancer Res* 72(11):2791-801. 2012. PMID: 22472122. PMC3417121.
218. Tilstra, JS, AR Robinson, J Wang, SQ Gregg, CL Clauson, DP Reay, LA Nasto, CM St. Croix, A Usas N Vo, J Huard, PR Clemens, **DB Stolz**, DC Guttridge, SC Watkins, GA Garinis, Y Wang, LJ Niedernhofer, PD Robbins. NF- $\kappa$ B inhibition delays DNA damage-induced senescence and aging in mice. *J Clin Invest*. 122(7):2601-12. 2012. PMID: 22706308. PMC3386805.
219. Orlichenko L, **DB Stolz**, P Noel, J Behari, S Liu, VP Singh. ADP-ribosylation factor-1 regulates trypsinogen activation via organellar trafficking of pro-cathepsin B and autophagic maturation in acute pancreatitis. *J Biol Chem* 287(29):24284-24293. 2012. PMID: 22570480. PMC3397854.
220. Evankovich J, R Zhang, JS Cardinal, L Zhang, J Chen, H Huang, **D Beer-Stolz**, TR Biliar, MR Rosengart, A Tsung. Calcium/Calmodulin-dependent protein kinase IV limits organ damage in hepatic ischemia/reperfusion injury through induction of autophagy. *Am J Physiol Gastrointest Liver Physiol* 303(2):G189-198. 2012. PMID: 22575222. PMC3404570
221. Huang Y, J Lu, X Gao, J Li, W Zhao, M Sun, **DB Stolz**, R Venkataraman, LC Rohan, S Li. PEG-derived embelin as a dual functional carrier for the delivery of Paclitaxil. *Bioconjug. Chem.* 23(7):1443-1451. 2012. PMID: 22681537. PMC3399921.
222. Ekser B, CC Lin, C Long, GJ Echeverri, H Hara, M Ezzelarab, VY Bogdanov, **DB Stolz**, K Enjyoji, SC Robson, D Ayares, A Dorling DK Cooper, B Gridelli. Potential factors influencing the development of thrombocytopenia and consumptive coagulopathy after genetically modified pig liver xenotransplantation. *Transpl Int*. 25(8):882-896. 2012. PMID: 22642260. PMC3394909.
223. Donker, RB, JF Mouillet, T Chu, CA Hubel, **DB Stolz**, AE Morelli, Y Sadovsky. The expression profile of C19MC microRNAs in primary human trophoblast cells and exosomes. *Mol Hum Reprod*. 18(8):417-424. 2012. PMID: 22383544. PMC3389496.
224. Stefanovic-Racic M, Yang X, Turner MS, Mantell BS, **Stolz DB**, Sumpter TL, Sipula IJ, Dedousis N, Scott DK, Morel PA, Thomson AW, O'Doherty RM. Dendritic cells promote

- macrophage infiltration and comprise a substantial portion of obesity-associated increases in CD11c+ cells in adipose tissue and liver. *Diabetes* 61(9):2330-2339. 2012. PMID: 22851575. PMC3425427.
225. Tanaka Y, N Shigemura, T Kawamura, K Noda, K Isse, **DB Stolz**, Y Toyoda, CA Bermudez, J Lyons-Weller, A Nakao. Profiling molecular changes induced by hydrogen treatment of lung allografts prior to procurement. *Biochem Biophys Res Comm*. 425(4):873-879. 2012. PMID: 22902635. PMC4007057.
226. Munich, S, S Sobo-Vujanovic, WJ Buchser, **D Beer-Stolz**, NL Vujanovic. Dendritic cell exosomes directly kill tumor cells and activate natural killer cells via TNF superfamily ligands. *Oncoimmunology* 1(7):1074-1083. 2012. PMID: 23170255 PMC3494621
227. Mo L, Y Wang, L Geary, C Corey MJ Alef, **D Beer-Stolz**, BS Zuckerbraun, S Shiva. Nitrite activates AMP kinase to stimulate mitochondrial biogenesis independent of soluble guanylate cyclase. *Free Radic Biol Med*. 53(7):1440-1450. 2012. PMID: 22892143 PMC3477807.
228. Sumpter TL, A Dangi, BM Matta, C Huang, **DB Stolz**, Y Vodovotz, AW Thomsson, CR Gandhi. Hepatic stellate cells undermine the allostimulatory function of liver myeloid dendritic cells via STAT3-dependent induction of IDO. *J Immunol*. 189(8):3848-3858. 2012. PMID: 22962681. PMC3466356.
229. Whitcomb DC,.....**D Stolz**, R Sutton, FU Weiss, CM Wilcox, NO Zarnescu, SR Wisniewski, MR McConnell, K Roeser, MM Barmada, D Yadav, B Devlin. Common genetic variants in the CLDN2 and PRSS1-PRSS2 loci alter risk for alcohol related and sporadic pancreatitis. *Nature Genetics*. 44(12):1349-1354. 2012. PMID: 23143602. PMC3510344.
230. Ding WX, F Guo, HM Ni, A Bockus, S Manley, **DB Stolz**, EL Eskelinen, H Jaeschke, XM Yin. Parkin and mitofusins reciprocally regulate mitophagy and mitochondrial spheroid formation. *J Biol Chem* 287(50):42379-42388. 2012. PMID: 23095748. PMC3516781.
231. El Filali, EE, J Hiralall, HA van Veen, **DB Stolz**, J Seppen. Human liver endothelial cells, but not macrovascular or microvascular endothelial cells engraft in the mouse liver. *Cell Transplant*. 22(10):1801-1811. 2012. PMID: 23044355.
232. Phillips, PM, LJ Phillips, HA Saad, MA Terry, **DB Stolz**, C Stoeger J Franks, D Davis-Boozer, "Ultrathin" DSAEK tissue prepared with a low-pulse energy, high frequency femtosecond laser. *Cornea* 32(1):81-86. 2013. PMID 22895047
233. Mishra, V, R Cline, P Noel, J Karlsson, CJ Baty, L Orlichenko, K Patel, RN Trivedi, SZ Husain, C Acharya, C Durgampudi, **DB Stolz**, S Navina, VP Singh. Src-dependent pancreatic acinar injury can be initiated independent of an increase in cytosolic calcium. *PLoS One* 8(6):e66471 2013 PMID: 23824669. PMC3688910.
234. Li HH, J Li, KJ Wasserloos, C Wallace, MG Sullivan, PM Bauer, **DB Stolz**, JS Lee, SC Watkins, CM St Croix, BR Pitt LM Zhang. Caveolae-dependent and independent uptake of albumin in cultured rodent endothelial cells. *PLoS One* 8(11):e81903. 2013. PMID: 24312378. PMC3842245.
235. Wheeler, SE, JT Borenstein, AM Clark, MR Ebrahimhkani, IJ Fox, L Griffith, W Inman, D Lauffenburger, T Nguyen, VC Pillai, R Prantl-Braun, **DB Stolz**, D Taylor, T Ulrich, R Venkataramanan, A Wells, C Young. All Human microphysical model of Metastasis Therapy. *Stem Cell Res Ther*. 4 Suppl 1:S11. doi:10.1186/scrt372 epub 2013. PMID: 24565274. PMC4028965.
236. Mangalmurti NS, JL Friedman, LC Wang, D Stolz, G Muthukumaran. DL Siegel, AM Schmidt, JS Lee, SM Albelda. The receptor for advanced glycation end products mediates lung endothelial activation by RBCs. *Am J Physiol Lung Cell Mol Physiol*. 2013. 304(4):L250-263. PMID: 23275625. PMC3567359.

237. Lee, SM JN McLaughlin, DR Frederick, L Zhu, K Thambyayya, KJ Wasserloos, I Kaminski, LL Pearce, J Peterson, J Li, JD Latoche, OM Peck Plamer, **DB Stolz**, CL Fattman, JF Alcorn, TD Oury, DC Angus, BR Pitt, AM Kaynar. Metallothionein-indice zinc partitioning exacerbates hyperoxic acute injury. *Am J Physiol Lung Cell Mol Physiol* 304(5):L350-360. 2013. PMID: 23275622. PMC3602737.
238. Zhang X, J Lu, Y Huang, W Zhao, Y Chen, J Li, X Gao, Venkataramanen M Sun, DB Stolz, L Zhang, S Li. PEG-Farnesylthiosalicylate conjugate as a nanocellular carrier for delivery of Paclitaxel. *Bioconjug Chem* 24(3):464-472. 2013. PMID: 23425093. PMC3623935.
239. Zhang M, S Ueki, S Kimura, O Yoshida, A Castellaneta, KS Ozaki, AJ Demetris, M Ross, Y Vodovotz, AW Thomson, **D Beer Stolz**, DA Geller, N Murase. Roles of Dendritic cells in murine hepatic warm and liver transplantation-induced cold ischemia/reperfusion injury. *Hepatology*. 57(4):1585-1596. 2013. PMID: 23184590. PMC3623935.
240. Wickline ED, Y Du, **DB Stolz**, M Khan, SP Monga.  $\beta$ Catenin at adherens junctions: mechanism and biologic implications in hepatocellular cancer after  $\beta$ -catenin knockdown. *Neoplasia* 15(4):421-434. 2013. PMID: 23555187. PMC3612914.
241. Neal MD CP Sodhi, M Dyer, BT Craig, M Good, H Jia, I Yazji, A Afrazi, WM Richardson, **D Beer-Stolz**, C Ma, T Prindle, Z Grant, MF Branca, Jozolek, DJ Hackam. A critical role for TLR4 induction in autophagy in the regulation of enterocyte migration and the pathogenesis of necrotizing enterocolitis. *J Immunol* 90(7):3541-3551. 2013. PMID: 23455503. PMC360882.
242. Loughran, PA, DB Stolz, SR Barrick, DS Wheeler, PA Friedman, RA Ruchubinski, SC Watkins, TR Billiar. PEX7 and EPB50 target iNOS to the peroxisome. *Nitric Oxide*. 31:9-19. 2013. PMID: 23474170. PMC3642215.
243. Sarin, M, Y Wang, F Zhang, K Rothermund, Y Zhang, J Lu, S Sims-Lucas, **D Beer-Stolz**, BE Van Houten, J Vockley, ES Goetzman, J Anthony Graves, EV Prochownik. Alterations in c-Myc phenotypes resulting from dynamin-related protein 1 (Drp1) mediated mitochondrial fission. *Cell Death Dis*. Jun 13;4:e670. 2013. PMID: 23764851 PMC3702284
244. Nace, GW, H Huang, JR Klune, RE Eid, BR Roseborough, S Korff, S Li, RA Shapiro, DB Stolz, CP Sodhi, DJ Hackham, DA Geller, TR Billiar, A Tsung. Cellular specific role of Toll-like receptor 4 in hepatic ischemia-reperfusion injury. *Hepatology* 58(1):374-387. 2013. PMID: 23460269. PMC3688695.
245. Han J, W Hou, C Lu, LA Goldstein, **DB Stolz**, SC Watkins, H Rabinowich. Interaction between Her2 and Beclin-1 underlies a new Mechanism of Reciprocal Regulation. *J Biol Chem*. 288(28):20315-20325 2013. PMID: 23703612. PMC3711298.
246. Delorme-Axford, E RB Donker, JF Mouillet, T Chu, A Bayer, Y Ouyang, T Wang, **DB Stolz**, SN Sarkar, AE Morelli, Y Sadovsky, CB Coyne. Human Placental trophoblasts confer viral resistance to recipient cells. *PNAS* 110(29):12048-12053. 2013. PMID: 23818581. PMC3718097.
247. Zhang H, **DB Stolz**, G Chalasani, AW Thomson. Hepatic B cells are readily activated by TLR4 ligation and secrete less IL-10 than lymphoid tissue B cells. *Clin Exp Immuno* 2013. PMID: 23617623. PMC3949635.
248. Huang, H, HW Chen, J Evankovich, W Yan, BR Roseborough, GW Nace, Q Ding, P Loughran, **D Beer-Stolz**, TR Billiar, CT Esmon, A Tsung. Histones activate the NLRP3 inflammasome in Kupffer cells during sterile inflammatory Liver injury. *J Immuno*. 191(5):2665-2679. 2013. PMID: 23904166. PMC37777242.
249. Vyas, AR, ER Hahm, JA Arlotti, S Watkins, **D Beer-Stolz**, D Desai, S Amin, SV Singh. Chemoprevention of Prostate cancer by D,L-Sulforaphane is augmented by

- pharmacological inhibition of autophagy. *Cancer Res.* 73(19):5985-5995. 2013. PMID: 23921360. PMC3790864.
250. Chi Sabins, N, JL Taylor, KP Fabian, LJ Appleman, JK Maranchi, **DB Stolz**, WJ Storkus. DLK1: A novel target for immunotherapeutic remodeling of the tumor blood vasculature. *Mole Ther.* 21(10):1958-1968. 2013. PMID: 23896726. PMC3808139.
251. Sitnick, MT MK Basantani, L Cai, G Schoiswohl, CF Yazbeck, G Distefano, V Ritov, JP Delaney, R Schreiber, **DB Stolz**, NP Gardner, PC Kienesburger, T Pulinilkunnil, R Zechner, BH Goodpaster, P Coen, EE Kershaw. Skeletal muscle triacylglycerol hydrolysis does not influence metabolic complications of obesity. *Diabetes* 62(10):3350-3361. 2013. PMID: 23835334. PMC3781480.
252. Schwartzman D, Schoedel, **DB Stolz** E Di Martino. Morphological and mechanical examination of the atrial "intima" *Europace* 15(11):1557-1561. 2013. PMID: 23608029.
253. Allen RA, W Wu, M Yao, D Dutta, X Duan, TN Bachman, HC Champion, **DB Stolz**, AM Robertson, K Kim, JS Isenberg, Y Wang. Nerve regeneration and elastin formation within poly(glycerol sebacate)-based synthetic arterial grafts one-year post-implantation in a rat model. *Biomaterials* 35(1):165-173. 2014. PMID: 24119457. PMC3882022.
254. Huang H GW Nace, KA McDonald, S Tai, JR Klune, BR Roseborough, Q Ding, P Loughran, X Zhu, D Beer-Stolz, EB Chang, T Billiar, A Tsung. Hepatocyte-specific high-mobility Box 1 deletion worsens the injury in liver ischemia/reperfusion.: A role for the intracellular high-mobility group box 1 in cellular protection. *Hepatology* 59(5):1984-1997. 2014. PMID: 24375466. PMCID: PMC3999251.
255. Norris, CA, M He, LI Kang, MQ Ding, JE Radder, MM Haynes, Y Yang, S Parajpe, WC Bowen, A Orr, GK Michalopoulos, **DB Stolz**, WM Mars. Sythesis of IL-6 by hepatocytes is a normal response to common hepatic stimuli. *PLoS One* 9(4):e96053 2014. PMID: 24763697. PMC3999098.
256. Bowen, WC, AW Michalopoulos, A Orr, MQ Ding, **DB Stolz**, GK Michalopoulos. Development of a chemically defined medium and discovery of new mitogenic growth factors for mouse hepatocytes: Mitogenic effects of FGF1/2 and PDGF. *PLoS One* 9(4):e95487. 2014. PMID: 24743506. PMC3990636.
257. Yun H, KL Lathrop, E Yang, M Sun, L Kagmann, V Fu, **DB Stolz**, JS Schuman, Y Du. A Laser-induced mouse model with long-term intraocular pressure elevation. *PLoS One*. 9(9):e107446. 2014. PMID: 25216052. PMC4162591.
258. Avin KG, PM Coen, W Huang, **DB Stolz**, GA Sowa, JJ Dube, BH Goodpaster, RM O'Doherty, F Ambrosio. Skeletal muscle as a regulator of the longevity protein, Klotho. *Front Physiol Jun* 17;5:189. 2014. PMID: 24987372. PMC4060456.
259. Stewart RK, A Dangi, C Huang, N Murase, S Kimura, **DB Stolz**, GC Wilson, AB Lentsch, CR Gandhi. A novel mouse model of depletion of stellate cells clarifies their role in ischemia/reperfusion- and endotoxin-induced acute liver injury. *J Hepatol.* 60(2):298-305. 2014. PMID: 24060854. PMC4195246.
260. Zhao Y, Z Xiong, EJ Lechner, PA Klenotic, BJ Hamburg, M Hulver, A Khare, T Oriss, N Mangalmurti, Y Chan, Y Zhang, MA Ross, **DB Stolz**, MR Rosengart, J Pilewski, P Ray, A Ray, RL Silverstein, JS Lee. Thrombospondin-1 triggers macrophage IL-10 production and promotes resolution of experimental lung injury. *Mucosal Immunol.* 7(2):440-448. 2014. PMID: 24045574. PMC3945733.
261. Lee, S T Yamada, T Osako, **DB Stolz**, M Abe, MT McCurry, N Murase, J Kotani, A Nakao. Recipient hyperbilirubinaemia protects cardiac graft in rat heterotopic heart. *Eur J Cardiothorac Surg.* 45(3):481-488. 2014. PMID: 23946500.

262. Han J, W Hou, LA Goldstein, **DB Stolz**, SC Watkins, H Rabinowich. A complex between Atg7 and caspase-9: a novel mechanism of cross-regulation between autophagy and apoptosis. *J Biol Chem* 289(10):6485-97. 2014. PMID: 24362031.PMC3945314.
263. Lavasani M, SD Thompson, JB Pollett, A Usas, A Lu, **DB Stolz**, KA Clark, B Sun, B Peault, J Huard. Human muscle derived stem/progenitor cells promote functional murine peripheral nerve regeneration. *J Clin Invest.* 124(4):1745-1756. 2014. PMID: 24642464. PMC3973076.
264. Zhang Y, Ghazwani M, J Li, M Sun, **DB Stolz**, F He, J Fan, W Xie, S Li. MiR-29b inhibits collagen maturation in hepatic stellate cells through down regulating the expression of HSP47 and lysyl oxidase. *Biochem Biophys Res Commun* 446(4):940-4 2014. PMID: 24650661. PMC4033690.
265. Huang H, HW Chen J Evankovich, W Yan, BR Roseborough, GW Nace, Q Ding, P Loughran, **D Beer-Stolz**, TR Billiar, CT Esmon, A Tsung. Histones activate the NLRP3 inflammasome in Kupffer cells during sterile inflammatory liver injury. *Hepatology* 59(5):1984-1997. 2014. PMID: 24375466 PMC3999251
266. Qian W, J Wang, V Roginskaya, LA McDermott, RP Edwards, **DB Stolz**, F Lliambi, DR Green, B Van Houten. Novel combination of mitochondrial division inhibitor 1 (mdivi-1) and platinum agents produces synergistic pro-apoptotic effect in drug resistant tumor cells. *Oncotarget.* June 30:5(12):4180-4194. 2014. PMID: 24952704. PMC4147315.
267. Marrone AK, **DB Stolz**, SI Bastacky, D Kostka, AJ Bodnar, J Ho. MicroRNA-17~92 is required for nephrogenesis and renal function. *J Am Soc Nephrol.* 25(7):1440-1452. 2014. PMID: 24511118. PMC4073423.
268. Tanaka Y, N Shigemura, K Noda, T Kawamura, K Isse, **DB Stolz**, CA Bermudez. Optimal lung inflation techniques in a rat lung transplantation model: A revisit. *Thorac Cardiovasc Surg.* 62(5):427-433. 2014. PMID: 24788707.
269. Clark AM, Wheeler SE, Taylor DP, Pillai VC, Young CL, Prantil-Baun R, Nguyen T, **Stolz DB**, Borenstein JT, Lauffenburger DA, Venkataraman R, Griffith LG, Wells A. A microphysiological system model of therapy for liver micrometastasis. *Exp Biol Med.* 239(9):1170-1179. 2014. PMID: 24821820.
270. Muller L, CS Hong, **DB Stolz**, SC Watkins, TL Whiteside. Isolation of Biologically active exosomes from Human plasma. *J Immuno Methods.* 2014. 411:55-65. PMID: 24952243. PMC4260336.
271. Ambrosio F, E Brown, **D Stolz**, R Ferrari, B Goodpaster, B Deasy, G Distefano, A Roperti, A Cheikhi, Y Garciafigueroa, A Barchowsky. Arsenic induces sustained impairment of skeletal muscle and muscle progenitor cell ultrastructure and bioenergetics. *Free Radic Biol Med* 574C:64-73. 2014. PMID: 24960579. PMC4159748.
272. Kaynar AM, S Yende, L Zhu, DR Frederick, R Chambers, CL Burton, M Carter, **DB Stolz**, B Agostini, AD Gregory, S Nagarajan, SD Shapiro, DC Angus. Effects of intra-abdominal sepsis on atherosclerosis in mice. *Crit Care.*18(5):469. 2014. PMID: 25182529. PMC4172909.
273. Long OS, JA Benson, JH Kwak, CJ Luke, SJ Gosai, LP O'Reilly, Y Wang, J Li, AC Veticam MT Meidel, **DB Stolz**, SC Watkins, S Zuchner, DH Perlmutter, GA Silverman, SC Pak. A *C. elegans* model of human a1-antitrypsin deficiency links components of the RNAi pathway to misfolded protein turnover. *Hum Mol Genet* 23(19):5109-22. 2014. PMID: 24838286. PMC4159155.
274. Griffith, LG, A Wells, **DB Stolz**. Engineering Liver. *Hepatology* 60(4):1426-1434. PMID: 24668880. PMC4176555.
275. Zhang L J Franks, **DB Stolz**, JF Conway, PH Thibodeau. Inducible polymerization and two-dimensional assembly of the repeats-in-toxin (RTX) domain from the *Pseudomonas*

- aeruginosa Alkaline Protease. *Biochemistry*. 53(41):6452-6462. 2014. PMID: 25232897 PMC4204888.
276. Wheeler SE, AM Clark, DP Taylor, CL Young, VC Pillai, **DB Stolz**, R Venkataraman, D Lauffenburger, L Griffith, A Wells. Spontaneous dormancy of metastatic breast cancer cells in an all human liver microphysiologic system. *Br J Cancer* 111(12):2342-2350. 2014. PMID: 25314052. PMC4264444.
277. Delorme-Axford E, S Morosky, J Bomberger, **DB Stolz**, WT Jackson, CB Coyne. BPIFB3 regulates autophagy and Cocksakievirus B replication through a noncanonical pathway independent of the core initiation machinery. *MBio* 5(6). pii: e02147-14. 2014. PMID: 25491355. PMC4324245.
278. Nuschke A, M Rodrigues, **DB Stolz**, CT Chu, L Griffith, A Wells. Human mesenchymal stem cells/multipotent stromal cells consume accumulated autophagosomes early in differentiation. *Stem Cell Res Ther* 5(6):1140 2014. PMID: 25523618. PMC4446103.
279. Gandhi CR, JR Chaillet, MA Nalesnik, S Kumar, A Dangi, AJ Demetris, R Ferrel, T Wu, S Divanovic, T Stankeiwicz, B Shaffer, **DB Stolz**, SA Harvey, J Wang, TE Starzl. Liver-specific deletion of Augmentor of liver regeneration accelerates development of steatohepatitis and hepatocellular carcinoma. *Gastroenterology*. 148(2):379-391. 2015. PMID: 25448926.
280. Fontes P, R Lopez, A van der Plaats, Y Vodovotz, M Minervini, V Scott, K Soltys, S Shiva, S Paranjpe, D Sadowsky D Barclay, R Zamora, D Stolz, A Demetris, G Michalopoulos, JW Marsh. Liver preservation with machine perfusion and a new developed cell-free oxygen carrier solution under subnormothermic conditions. *Am J Transplant*. 15(2):381-394. 2015. PMID: 25612645.
281. Himes KP, A Young, E Koppes, **D Stolz**, Y Barak, Y Sadovsky, JR Chaillet. Loss of inherited genomic imprints in mice leads to severe disruption in placental lipid metabolism. *Placenta*. 36(4):389-396. 2015. Doi: 10.1016/j.placenta.2015.01.012. PMID: 25662615. PMC4359963.
282. Geskin LJ, S Viragova, **DB Stolz**, P Fuschiotti. Interleukin-13 is over expressed in cutaneous T-cell lymphoma cells and regulates their proliferation. *Blood* 125(18):2798-2805. 2015. PMID: 25628470. PMC4424628.
283. Manohar R, Y Li, H Fohrer, L Guzik, **DB Stolz**, UR Chandran, WA LaFramoise, E Lagasse. Identification of a candidate stem cell in human gallbladder. *Stem Cell Res*. 14(3):258-269. 2015. PMID: 25690322. PMC4439375.
284. O-Sullivan I, W Zhang, DH Wasserman, CW Liew, J Liu, J Paik, RA DePinho, **DB Stolz**, CR Kahn, MW Schwartz, TG Unterman. FoxO1 integrates direct and indirect effects of hepatic glucose utilization. *Nat Commun* 6:7079. Doi.1038/ncomms8079. 2015. PMID: 25963540.
285. Reay, DP, SI Bastacky, KE Wack, **DB Stolz**, PD Robbins, PR Clemens. D-Amino acid substitution of peptide-mediated NF- $\kappa$ B suppression in mdx mice preserves therapeutic benefit in skeletal muscle but causes kidney toxicity. 2015. *Mol. Med.* 21(1):442-452. PMID: 26018805. PMC4559531.
286. **Stolz**, DB Sims-Lucas. Unwrapping the origins and roles of the renal endothelium. *Pediatr Nephrol*. 30(6):865-872. 2015 PMID:24633402. PMC4164630. (Cover)
287. Yokota S, Yoshida O, Dou L, Spadaro AV, Isse K, Ross MA, **Stolz DB**, Kimura S, Du Q, Demetris AJ, Thomson AW, Geller DA. IRF-1 promotes liver transplant ischemia/reperfusion injury via hepatocyte IL-15/IL-15R $\alpha$  production. *J Immunol*. 2015; 194(12):6045-56. PMID: 25964490. PMC4458432
288. Tafaleng EN, S Chakraborty, B Han, P Hale, W Wu, A Soto-Gutierrez, CA Feghali-Bostwick, AA Wilson, DN Kotton, M Nagaya, SC Strom, JR Chowdhury, **DB Stolz**, DH

- Perlmutter, IJ Fox. Induced pluripotent stem cells model personalized variations in liver disease due to a1-antitrypsin deficiency. *Hepatology* 62(1):147-157. 2015. PMID: 25690322. PMC4482790.
289. Zhao Y, TF Olonisakin, Z Xiong, M Hulver, S Sayeed, MT Yu, AD Gregory, EJ Kochman, BB Chen, RK Mallimpalli, M Sun, RL Silverstein, **DB Stolz**, SD Shapiro, A Ray, P Ray, JS Lee. Thrombospondin-1 restrains neutrophil granule serine protease function and regulates the innate immune response during Klebsiella pneumoniae infection. *Mucosal Immunol.* 7(2):440-448. 2015. PMID: 25492474. PMC4465063.
290. Brown MF, BJ Leibowitz, D Chen, K He, RW Sobel, **D Beer-Stolz**, L Zhang, J Yu. Loss of caspase-3 sensitizes colon cancer cells to genotoxic stress via RIP-1-dependent necrosis. *Cell Death Dis.* Apr 23;6:e1729. doi:10.1038/cddis.20q5.104 PMID: 25906152.
291. Schoiswohl G, Stefanovic-Racic M, Menke MN, Wills RC, Surlow BA, Basantani MK, Sitnick MT, Cai L, Yazbeck CF, **Stolz DB**, Pulinilkunnil T, O'Doherty RM, Kershaw EE. Impact of reduced ATGL-mediated adipocyte lipolysis on obesity-associated insulin resistance and inflammation in male mice. *Endocrinology*. 2015. Jul 21:en20151322. PMID: 26196542.
292. Harris KG, Morosky SA, Drummond CG, Patel M, Kim C, **Stolz DB**, Bergelson JM, Cherry S, Coyne CB. RIP3 Regulates Autophagy and Promotes Coxsackievirus B3 Infection of Intestinal Epithelial Cells. *Cell Host Microbe*. 2015 Aug 12;18(2):221-32. doi: 10.1016/j.chom.2015.07.007. PubMed PMID: 26269957. PMC4562276.
293. Kimura S, Ozaki KS, Ueki S, Zhang M, Yokota S, **Stolz DB**, Geller DA, Murase N. Contribution of alloantigens to hepatic ischemia/reperfusion injury: Roles of NK cells and innate immune recognition of non-self. *Liver Transpl*. 2015 Sep 3. doi: 10.1002/lt.24330. [Epub ahead of print] PubMed PMID: 26335784
294. Phinney DG, M DiGiuseppe, J Njah, E Sala, S Shiva, CM St Croix, **DB Stolz**, SC Watkins, YP Di, GD Leifkauf, J Kolls, DW Riches, G Deiuliis, N Kaminski, SV Boregowda, DH McKenna, LA Ortiz. Mesenchymal stem cells use extracellular vesicles to outsource mitophagy and shuttle microRNAs. *Nature Comm* 2015. 6:8472. PMID: 26442449. PMCID: PMC4598952.
295. Hidvegi T, **DB Stolz**, JF Alcorn, SA Yousem, J Wang, AS Leme, AM Houghton, P Hale, M Ewing, H Cai, N Pastore, P Annunziata, N Laminsky, J Pilewskiu, SD Shapiro, SC Pak, GA Silverman, N Brunetti-Pierri, DH Perlmuter. Enhancing autophagy with drugs or lung-directed gene therapy reverses pathological effects of respiratory epithelial cell proteinopathy. *J Biol Chem* 2015 290(50):29742-57 PMID 26494620
296. Wheeler DS, SM Underhill, **DB Stolz**, GH Murdoch, E Thiels, G Romero, SG Amara. Amphetamine activates RhoGTPase signaling to mediate dopamine transporter internalization and acute behavioral effects of amphetamine. *Proc Natl Acad Sci USA* 2015;112(51):E7138-47. PMID: 26553986.
297. Zhou L, T Pradhan-Sundd, M Poddar, S Singh, A Kikuchi, **DB Stolz**, W Shou, Z Li, KN Nejak-Bowen, SP Monga. Mice with hepatic loss of the desmosomal protein gamma catenin are prone to cholestatic injury and chemical carcinogenesis. *Am J Path*. 2015. 185(12):3274-89. PMID: 26485505
298. Dheer R, J Patterson, M Dudash EN Stachler, KJ Bibby, **DB Stolz**, S Shiva, Z Wang, SL Hazen, A Barchowsky, JF Stolz. Arsenic induces structural and compositional colonic microbiome change and promotes host nitrogen and amino acid metabolism. *Toxicol Appl Pharmacol* 2015. 289(3):397-408. PMID: 26529668. PMCID: PMC4662606.
299. Zhang C, R Ferrari, K Beezhold, K Stearns-Reider, A D'Amore, M Haschak, **D Stolz**, PC Robbins, A Barchowsky, F Ambrosio. Arsenic promotes NF- $\kappa$ B-mediated fibroblast

- dysfunction and matrix remodeling to impair muscle stem cell function. *Stem Cells* 2015 doi.1002/stem.2232. PMID: 26537186
300. Dangi A, C Huang, A Tandon, **D Stolz**, T Wu, CR Gandhi. Endotoxin-stimulated rat hepatic stellate cells induce autophagy in hepatocytes as a survival mechanism. *J Cell Physiol* 2016; 231(1):94-105. PMID: 26031389.
301. Kagan VE, Jiang J, Huang Z, Tyurina YY, Desbourdes C, Cottet-Rousselle C, Dar HH, Verma M, Tyurin VA, Kapralov AA, Cheikhi A, Mao G, Stolz D, St Croix CM, Watkins S, Shen Z, Li Y, Greenberg ML, Tokarska-Schlattner M, Boissan M, Lacombe ML, Epend RM, Chu CT, Mallampalli RK, Bayır H, Schlattner U. NDPK-D (NM23-H4)-mediated externalization of cardiolipin enables elimination of depolarized mitochondria by mitophagy. *Cell Death Differ.* Doi 10.1038/cdd.2015.160 PMID: 26742431
302. Demetris AJ, Bellamy CO, Gandhi CR, Prost S, Nakanuma Y, **Stolz DB**. Functional immune anatomy of the liver – as an allograft. *Am J Transplant.* 2016. Doi: 10.1111/ajt.13749. PMID: 26848550.
303. Khan Z, Venkat VL, Soltys KA, **Stolz DB**, Ranganathan S. A challenging case of severe infantile cholestasis in alpha-1 antitrypsin deficiency. *Pediatr Dev Pathol.* 2016. In press. PMID: 26855337.
304. Wiley CA, Bissel SJ, Lesniak A, Dixon CE, Franks J, **Stolz DB**, Sun M, Wang G, Switzer Iii RC, Kochanek PM, Murdoch GH. Ultrastructure of diaschisis lesions following traumatic brain injury. *Journal of Neurotrauma.* 2016; PMID: 26914973
305. Zhang C, Ferrari R, Beezhold K, Stearns-Reider K, D'Amore A, Haschak M, **Stolz D**, Robbins PD, Barchowsky A, Ambrosio F. Arsenic Promotes NF-Kb-Mediated Fibroblast Dysfunction and Matrix Remodeling to Impair Muscle Stem Cell Function. *Stem Cells* 2016; 34(3):732-42. NIHMSID: NIHMS764682 PMID: 26537186, PMCID: PMC4817845
306. Cunningham KE, Vincent G, Sodhi CP, Novak EA, Ranganathan S, Egan CE, **Stolz DB**, Rogers MB, Firek B, Morowitz MJ, Gittes GK, Zuckerbraun BS, Hackam DJ, Mollen KP. Peroxisome Proliferator-activated Receptor- $\gamma$  Coactivator 1- $\alpha$  (PGC1 $\alpha$ ) Protects against Experimental Murine Colitis. *The Journal of Biological Chemistry.* 2016; 291(19):10184-200. PMID: 26969166, PMCID: PMC4858969
307. Wickline ED, Dale IW, Merkel CD, Heier JA, **Stolz DB**, Kwiatkowski AV. Alpha-T-Catenin Is a Constitutive Actin-Binding  $\alpha$ -Catenin That Directly Couples the Cadherin-Catenin Complex to Actin Filaments. *The Journal of Biological Chemistry.* 2016; 291(30):15687-15699. PMID: 27231342
308. Patel A, Xue Y, Mukundan S, Rohan LC, Sant V, **Stolz DB**, Sant S. Cell-Instructive Graphene-Containing Nanocomposites Induce Multinucleated Myotube Formation. *Annals of biomedical engineering.* 2016; 44(6):2036-48. PMID: 26983841
309. Huleihel L, Hussey GS, Naranjo JD, Zhang L, Dziki JL, Turner NJ, **Stolz DB**, Badylak SF. Matrix-bound nanovesicles within ECM bioscaffolds. *Science Advances.* 2016; 2(6):e1600502. PMID: 27386584, PMCID: PMC4928894
310. Liu Q, Rojas-Canales DM, Divito SJ, Shufesky WJ, **Stolz DB**, Erdos G, Sullivan ML, Gibson GA, Watkins SC, Larregina AT, Morelli AE. Donor dendritic cell-derived exosomes promote allograft-targeting immune response. *The Journal of Clinical Investigation.* 2016; 126(8):2805-2820. PMID: 27348586
311. Corti P, Xue J, Tejero J, Wajih N, Sun M, **Stolz DB**, Tsang M, Kim-Shapiro DB, Gladwin MT. Globin X is a six-coordinate globin that reduces nitrite to nitric oxide in fish red blood cells. *Proceedings of the National Academy of Sciences of the United States of America.* 2016. 113(30):8538-8543. PMID: 27407144

Complete list of Published Work in MyBibliography:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/12qOII959-wA8/bibliography/41157215/public/?sort=date&direction=ascending>

**Book Chapters**

1. **Stoltz, DB** Daniel Branton & Bruce S. Jacobson. Plasma Membrane Isolation Using the Cationic Silica Isolation Technique. In: Cell Biology: A Laboratory Manual. Eds. D.L. Spector, L. Leinwand, R. Goldman. 1998. Vol. 1. pp 35.1-35.14. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY.
2. Michalopoulos, GK, W Mars, **DB. Stoltz**, T-H Kim. Hepatic Regeneration. In: Chronic Hepatitis: New Concepts of Pathogenesis, Diagnosis and Treatment. Ed. Dienes et al., 2000. Kluwer Academic Publishers, Boston, MA
3. Papworth, GD, **DB Stoltz**, and S.C. Watkins. Imaging Dendritic Cells: A Primer. In: Dendritic Cells. Biology and Clinical Applications. 2nd Edition. Eds. Lotze, ME, Thomson, AW. 2001. Academic Press, San Diego, pp 231-242.
4. Khan, Z, JM Crawford, **DB Stoltz**. Hepatocyte Ultrastructure. In: Oxford Textbook of Hepatology, 3<sup>rd</sup> Edition. JP Benhamou, A. Blei, J-F Dufour, P. Ginès, S. Friedmann, J. Reichen, J. Rodes, C. Valla, F. Zoulim Editors. 2007. Pp 20-28.
5. Yates, C, **DB Stoltz**, LG Griffith. Imaging Invasion and Metastasis ex vivo. In Cell Motility in Cancer Invasion and Metastasis (Ed: A Wells, Kluwer Academic Press, Amsterdam). 2006. pp. 73-88.
6. Fink MP, **Beer-Stoltz D**, Liu S, Sappington P, and Delude RL. Epithelial Barrier Dysfunction as a Mechanism Underlying the Pathogenesis of Multiple Organ Dysfunction. In Critical Care Nephrology, 2<sup>nd</sup> Ed. (Eds C Ronco, R Bellmo, J Kellum; Elsevier) 2009. pp.808-814.
7. **Stoltz, DB.** Liver Sinusoidal Endothelial Cells. In: Molecular Pathology of Liver Diseases. Ed. SP Monga, Springer) 2011. pp. 97-107.

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## PROFESSIONAL ACTIVITIES

### TEACHING

#### Outside of University of Pittsburgh

**UNIVERSITY OF MASSACHUSETTS, AMHERST, MA**

**1986-1989** **Biochemistry Laboratory for Majors.** Teaching assistant.

Taught major biochemistry techniques (enzyme isolation and kinetics, metabolic labeling, TLC, chromatography, gel electrophoresis, western blotting and molecular biology and cloning) to junior and senior biochemistry majors. Prepared and administered quizzes and exams, graded lab reports.

**1987-1990**

**Cell Biology.** Teaching assistant and guest lecturer.

Graded exams and gave yearly 2 day lectures on collagen synthesis, protein synthesis, glycosylation, trafficking and secretion as well as cell polarity development and maintenance.

**1987**

**Senior Seminar. Instructor.**

Library research and writing course for advanced honors biochemistry students in the discipline of developmental biology.

**1988** **Using Computers in Biochemistry (senior honors course). Instructor**  
Using computers to aid in library research. Examined and applied molecular modeling software to molecule structure and design as well as implementing spreadsheet and graphics programs for biochemistry data analysis, especially enzyme kinetics and pH determination of buffers.

**1986-1990** **Undergraduate and Graduate Independent Research Projects, UMass, Amherst**  
Supervisor. Supervised research projects of 5 undergraduate independent study and honors students and 2 first year graduate student rotations in my graduate laboratory at UMass. One undergraduate student (Stoltz, Bannish & Jacobson, 1992) and one graduate student (Stoltz, Mahoney & Jacobson, 1992) co-authored papers on specific aspects of my research.

**Fall 1995** **DUQUESNE UNIVERSITY**  
**General Biology I. Duquesne University, Pittsburgh, PA.**  
Visiting Faculty. Taught General Biology I (evolution, ecology, animal and plant diversity) to Biological Science and Health Science Majors. 50 students, 2 x 1.5 hr lectures/week.

#### **UNIVERSITY OF PITTSBURGH GRADUATE SCHOOL TEACHING:**

**Foundations in Biomedical Science**, (S. Phillips, coordinator) Lecture Title: Protein import into peroxisomes and mitochondria.

**Fall 1999** (45 students 1 hr lecture)

**Fall 2000** (40 students 1 hr lecture)

**Foundations in Biomedical Science**, Michael Tsang, coordinator) Lecture Title: Protein import into endoplasmic reticulum, mitochondria and peroxisomes.

**Fall 2012** 25 students 1.0 hours.

**Fall 2013** 25 students 1.5 hours. (Evaluation: 4/5)

**Fall 2014** 25 students 2.0 hours (Evaluation )

**Molecular Mechanisms of Tissue Growth and Development MSCMP 2730** (S. Katyal/ A Bell Directors). Lecture title: Angiogenesis and Vasculogenesis

**Spring 2000** (15 students, 1 hr lecture)

**Spring 2001** (15 students, 1 hr lecture)

**Spring 2002** (15 students, 1 hr lecture)

**Spring 2003** (15 students, 1 hr lecture)

**Spring 2004** (6 students, 1 hr lecture)

**Spring 2005** (8 students, 1 hr lecture, Teaching evaluation 4.4/5)

**Spring 2006** (16 students, 1 hr lecture, Teaching evaluation 4.5/5)

**Spring 2007** (18 students, 1 hr lecture)

**Spring 2008** (18 students 1 hr lecture)

**Spring 2009** (18 students 1 hr lecture)

**Spring 2010** (22 students, 1 hr lecture)

**Spring 2011** (14 students, 1 hr lecture)

**Graduate Histology MSCBMP 2870** (G. Duker, Director) Lecture topic: Liver, Gall Bladder and Pancreas.

**Spring 2000** (4 students, 1 hr lecture)

**Fall 2001** (5 students, 1 hr lecture)

**Fall 2002** (4 students, 1 hr lecture)

**Spring 2004** (4 students, 1 hr lecture)

**Spring 2006** (4 students, 1 hr lecture)

**Spring 2011** (4 students 1 hr lecture)

**Spring 2012** (6 students 1 hr lecture)

**Spring 2013** (3 students, 1 hr lecture)

**Spring 2014** (3 students, 1 hr lecture)

**Spring 2015** (6 students, 1 hr lecture)

**Spring 2016** (4 students, 1 hr lecture)

**Angiogenesis MSCMP 3750** (Shiyuan Cheng and G. Michalopoulos, Directors) 3 x 1.5 hr

**2003-2012:**

lectures: Topics:

Lecture 1: Angiogenesis in Development and Organogenesis.

Lecture 2: Angiogenesis in Wound Healing and Ischemic Diseases.

Lecture 3: Endothelial Cell Precursors and Their Application in Therapy.

**Spring 2003** (2 students, 3 lectures, 4.5 hr total)

**Spring 2004** (4 students, 3 lectures, 4.5 hr total)

**Spring 2005** (5 students, 3 lectures, 4.5 hr total)

**Spring 2006** (4 students, 3 lectures, 4.5 hr total, Eval 4/5)

**Spring 2007** (5 students, 3 lectures, 4.5 hr total Eval 4.5/5)

**Spring 2008** (4 students, 3 lectures, 4.5 hr total)

**Spring 2009** (4 students, 3 lectures, 4.5 hr total Eval 4.3/5)

**Spring 2010** (14 students, 3 lectures, 4.5 hr total, Eval 4.3/5)

**Spring 2011** (14 students 3 lectures 4.5 hr total, Eval 4.5/5)

Lecture 1: Techniques to study angiogenesis and blood flow & vascular bed specialization during organogenesis.

Lecture 2: Angiogenesis in Wound Healing and Ischemic Diseases.

Lecture 3: Endothelial Cell Precursors and Their Application in Therapy.

**Spring 2012** (12 Students 3 lectures 4.5 hr total Eval 4.375/5)

**Angiogenesis MSCMP 3750** This course was re-organized in 2013 after the 2012 departure of Shiyuan Cheng. The course is now co-directed by Drs. Shanmugam Nagarajan and Donna Stoltz. Lectures were modified and changed to accommodate changing needs of the students.

**Spring 2013, 2014:**

Lectures: 4 Lectures, 5 hrs total.

Topics

Lecture 1: Endothelial Cell Biology I

Lecture 2: Endothelial Cell Biology II

Lecture 3: Angiogenesis in Wound Healing and Ischemic Diseases

Lecture 4: Endothelial cell precursors and Their Application in Therapy

**Spring 2014:** 4 lectures 5 hrs, 8 students.

**Spring 2015:** 4 lectures, 5 hrs, 9 students

**Spring 2016:** 1 lecture 1.5 hr. 8 Students. Endothelial cell Biology: Histology.

**Multiparametric Microscopic Imaging MSCBMP 2860** (Co-Directed by DB Stolz and CM St. Croix 2009- present). 2 hr lectures with labs 2 x per week. Topics covered:

Lecture 1 & 2: Cell and Tissue Labeling

Lecture 3: TEM & SEM

Lecture 4: EM processing

Lecture 5: Special Topics in Electron Microscopy

Lecture 6: Ethical Image processing and Using Photoshop to Make Figures for Publication

**Summer 2004** (12 students, 5 lectures, 10 hr total)

**Summer 2005** (7 students, 6 lectures, 12 hr total)

**Summer 2007** (8 students, 5 lectures, 10 hr total)

**Summer 2009** (6 students, 4 lectures, 8 hrs total)

**Summer 2011** (10 students, 5 lectures, 10 hrs total)

**Summer 2012** (8 students, 5 lectures, 10 hrs total)

**Summer 2013** (9 students, 5 lectures, 10 hrs total)

**Summer 2014** (6 students, 5 lectures, 10 hrs total)

**Summer 2015** (7 students, 6 lectures, 12 hrs total)

**Summer 2016** (5 students, 6 lectures, 12 hrs total)

**Cell Therapy Bioeng/MSCMP 3770** (Stephen Strom). Lecture topic: Vascular Endothelial cell chimerism: Fact or Fiction? Dr Strom left Pitt 2012.

**Summer 2004** (10 students 1 lecture, 1.5 hr)

**Summer 2005** (10 students, 1 lecture, 1.5 hr)

**Summer 2006** (5 students, 1 lecture, 1.5 hr)

**Summer 2007** (6 students, 1 lecture, 1.5 hr, Teaching Eval 4.5/5)

**Summer 2008** (6 students, 1 lecture, 1.5 hr)

**Summer 2010** (6 students 1 lecture, 1.5 hr)

**Pathophysiology of Disease EOH 2203** (Claudette St. Croix) Lecture topic: The Liver

**Spring 2008** (3 students 1 lecture 1.5 hr)

**Spring 2009** (6 students 1 lecture 1.5 hr)

**Spring 2011** (6 students 1 lecture 1.5 hr)

**Spring 2013** (8 Students 1 lecture 1.5 hr)

**Spring 2015** (12 students 2 x 1.5 hr lectures)

**Functional Tissue Engineering/Bioeng 2072**

Lecture 1: Immuno-labeling

Lecture 2: Angiogenesis

**Fall 2008:** (15 students 2 lectures 3 hr)

**Scientific Ethics INTBP 2290** (John Horn, Course Director)

Lecture: Record Keeping and Ethical Data Presentation

**Summer 2010:** (~35 students, 1 hr Evaluation 4.36/5)

**Summer 2011:** (~35 students, 1 hr Evaluation 4.36/5)

**Summer 2012:** (~ 35 students, 1 hr Evaluation 4.38/5)

**Summer 2013:** (~35 students, 1 hr)

**Summer 2014:** (~35 students 1 hr Evaluation 4/5)

**Summer 2015:** (~35 students 1 hr Evaluation 4.68/5)

**Summer 2016:** (~35 students 1 hr )

**Scientific Ethics MSNBIO2010** (Carl Lagenaur, Course director)

Ethical Data Presentation

**Summer 2014:** (8 students, 1 hr)

**Summer 2015:** (12 students, 1 hr)

**Cell Biology of Normal and Diseased States MSCBMP 2880**

Lecture 1 Cell migration and the Cytoskeleton (1.5 hr)

Lecture 2 Wound healing /Angiogenesis (1.5 hr)

2 Discussion sections/literature 1 hr each.

**Spring 2011** (7 students, Eval 4.83/5)

**Spring 2012** (5 students)

**Spring 2013** (2 students)

**Spring 2015** (6 students)

**Experiments and Logic in Cell Biology MSCBMP 2875**

Facilitator: Student-directed longitudinal course exploring the interplay between hypothesis generation and experimental methods in cell biology. Small group active learning.

**Spring 2012:** 7 students

**Fall 2012:** 8 students

**Spring 2013:** 6 students

**Fall 2013:** 4 students

**Spring 2014:** 3 students.

**Fall 2014:** 4 students

**Spring 2015:** 6 students

**Fall 2015:** 7 students

**Spring 2016:** 6 students

**Extracellular Matrix in Tissue Biology and Bioengineering MSCMP 3735**

Lecture: Imaging extracellular matrix.

**Fall 2013:** (17 students, 1.5 hr lecture)

**Fall 2014:** (12 students 1.5 hr lecture)

**Fall 2015 :** (12 students 1.5 hr lecture)

**Cellular Physiology of the Kidney** MSCBMP2895

Histology and imaging in the kidney

**Summer 2013** (12 students 1.5 hr lecture)

**Summer 2014** (8 students 1.5 hr lecture)

**Summer 2015** (7 students 1.5 hr lecture)

**Summer 2016** (8 students 1.5 hr lecture Eval 4.5/5)

**UNIVERSITY OF PITTSBURGH MEDICAL SCHOOL TEACHING:**

**Cell Structure, Metabolism and Nutrition** (S. Morris, Coordinator) PBL facilitator for Medical Students

**Fall 1999** (9 students, 12 classes, 18 hr, Evaluation 3.0/5)

**Fall 2000** (9 students, 12 classes, 18 hr, Evaluation 4.0/5)

*Curriculum Vitae*

*Updated August 11, 2016*

*Donna Beer Stolz, Ph.D.*

**Cellular and Pathologic Basis of Disease Course, 1<sup>st</sup> Year Medical Student Curriculum:**

**1. Problem Based Learning Case Studies Facilitator** (discontinued 2008)

**Fall 2004** (9 students, 4 classes, 1.5 hr/class Eval 4.11/5)  
**Fall 2005** (9 students, 4 classes 1.5 hr /class, Eval 4.6/5)  
**Fall 2006** (9 students 4 classes 1.5 hr/class Evaluation4.5/5)  
**Fall 2007** (9 students 4 classes 1.5 hr/classEvaluation:4.5/5)

**2. Histology Instructor, First Year Medical Students** (5 labs: Epithelial lab, Connective tissue lab, Cartilage and Bone lab, Muscle lab, Nerve lab, Vascular lab).

**Fall 2004** (~35 students, 5 labs, 7.5 hr total, Evaluation: 4.48/5)  
**Fall 2005** (~35 students, 5 labs, 7.5 hr total, Evaluation: 4.6/5)  
**Fall 2006** (~35 students 5 labs, 7.5 hr total, Evaluation: 4.5/5)  
**Fall 2007** (~35 students 5 labs, 7.5 hr total, Evaluation: 4.5/5)  
**Fall 2008** (~35 students 5 labs, 7.5 hr total, Evaluation: 4.5/5)  
**Fall 2009** (~35 students 5 labs, 7.5 hr total, Evaluation: 4.7/5)  
**Fall 2010** (~35 students 5 labs, 7.5 hr total, Evaluation: 4.9/5)  
**Fall 2011** (~35 students 5 labs, 7.5 hr total, Evaluation: 4.9/5)  
**Fall 2012** (~35 students 5 labs, 7.5 hr total, Evaluation: )  
**Fall 2103** (~35 students, 5 labs, 7.5 hr total, Evaluation 4.6/5)  
**Fall 2015** (~35 Students, 5 labs, 7.5 hr total, Evaluation 5/5)

**3. Histology Workshop Facilitator, First Year Medical Students.**

**Fall 2004** (9 students, 3 workshops, 4.5 hr total, Eval. 4.7/5)  
**Fall 2005** (9 students, 3 workshops, 4.5 hr total, Eval. 4.6/5)  
**Fall 2006** (9 Students, 3 workshops 4.5 hr total Eval. 4.5/5)  
**Fall 2007** (9 Students, 3 workshops 4.5 hr total Eval 4.5/5)  
**Fall 2008** (9 Students, 3 workshops 4.5 hr total Eval 4.5/5)  
**Fall 2009** (9 students 3 workshops 4.5 hr total Eval 4.7/5)  
**Fall 2010** (9 students 3 workshops 4.5 hr total Eval 4.9/5)  
**Fall 2011** (9 students 3 workshops 4.5 hr total Eval 4.9/5)  
**Fall 2012** (9 students 3 workshops 4.5 hr total Eval 4.9/5)  
**Fall 2013** (9 students 3 workshops 4.5 hr total Eval 4.9/5)  
**Spring 2015** (9 students 3 workshops 4.5 hr total, Eval 5/5)  
**Spring 2016** (9 students 3 workshops 4.5 hr total, Eval 5/5)

**4. Cellular and Pathological Basis of Disease MED 5115. Medical Student Teaching: MS1:**

Lecture: Angiogenesis and Vasculogenesis

**Fall 2005:** (120 students, 50 min lecture, Evaluation 3.0/5).  
**Fall 2006:** (120 Students, 50 min Lecture, Evaluation 3.1/5)  
**Fall 2007:** (120 Students, 50 min Lecture, Evaluation 3.3/5)  
**Fall 2008:** (120 Students, 50 min Lecture, Evaluation 3/5)  
**Fall 2009:** (120 students, 50 min lecture Evaluation 3.2/5)  
**Fall 2010:** (120 students, 50 min lecture Evaluation 3.6/5)  
**Fall 2011:** (120 students, 50 min lecture Evaluation 4.4/5)  
**Fall 2012:** (120 students, 50 min lecture Evaluation 4/5)

**Fall 2013:** (120 students, 50 min lecture Evaluation 4.5/5)

**Fall 2015:** (120 students, 50 min lecture, Evaluation 3.7/5)

## 5. Cutaneous Wound Healing Team Based Learning

**Spring 2011** (120 students, 120 min Team-based interactive workshop)

**Fall 2011** (18 students, 120 min Team-based interactive workshop)

**Fall 2012** (18 students, 120 min Team-based interactive workshop Eval 4.3/5)

**Fall 2013** (18 students, 120 min Team-based interactive workshop)

**Spring 2015** (18 students, 120 min Team-based interactive workshop, Eval 4.7/5)

**Spring 2016** (18 students, 120 min Team-based interactive workshop, Eval )

## Fuel and Metabolism: Medical Student Year 1

Problem Based Learning Facilitator:

**Spring 2007** (9 students, 2 classes 1.5 hr/class Evaluation 4.3/5)

**Spring 2008** (9 students, 3 classes 1.5 hr/class Evaluation 4.4/5)

## 5. Digestion and Nutrition, Medical Student Year 2: Histology Labs.

Lab 1&2: Oral Cavity, Esophagus, Stomach, Lab 3: Small & Large Intestine, Lab 4: Liver, Gall Bladder, Pancreas.

**Fall 2004** (~35 students, 3 labs, 4 hr total time)

**Fall 2005** (~35 students, 3 labs, 4 hr total time)

**Fall 2006** (~35 students, 3 labs, 4 hr total time)

**Fall 2007** (~35 students, 3 labs, 4 hr total time)

**Fall 2008** (~35 students, 3 labs, 4 hr total time Eval 4.3/5)

**Fall 2009** (~35 students 2 labs 3 hr total time)

**Fall 2010** (~35 students 2 labs 3 hr total time Eval 4.3/5)

**Fall 2011** (~35 students 2 labs 3 hr total time)

**Fall 2012** (~35 students 2 labs 3 hr total time)

**Fall 2013** (~35 students 2 labs 3 hr total time)

**Fall 2014** (~35 students 3 labs 3 hr total time Eval 4.5/5)

**Fall 2015** (~35 students 3 labs 3 hr total time)

**Fall 2016** (~35 students 3 labs 3 hr total time)

## 6. Body Fluid Homeostasis Medical Student Year 2 Histology labs

Lab 1 Renal Segment, Lab 2 Pulmonary Segment

**Fall 2006** (~35 students 2 labs, 3 hr total time)

**Fall 2007** (~35 students 2 labs, 3 hr total time)

**Fall 2008** (~35 students, 2 labs, 3 hr total time)

**Fall 2009** (~ 35 students 2 labs 3 hr total time)

**Fall 2011** (~35 students 2 labs 3 hr total time)

**Fall 2012** (~35 students, 2 labs, 3 hr total time)

**Fall 2013** (~35 students, 2 labs, 3 hr total time)

**Fall 2014** (~35 students, 2 labs, 3 hr total time)

**Fall 2015** (~35 students, 2 labs, 3 hr total time)

**Fall 2016** (~35 students, 2 labs, 3 hr total time)

## 7. Endocrine Medical Student Year 2 Histology labs

**Spring 2007**(~35 students 1 lab, 1.5 hr total time)  
**Spring 2008** (~35 students 1 lab 1.5 hr total time)  
**Spring 2009** (~35 students 1 lab 1.5 hr total time)  
**Spring 2015** (~35 students 1 lab 1.5 hr total time)  
**Spring 2016** (~35 students 1 lab 1.5 hr total time)

**8. Reproduction Medical Student Year 2 Histology Labs**

**Spring 2009** (~35 students 1 lab 1.5 hr total time)

**9. Methods and Logic in Biomedicine 2.**

**Facilitator for 2<sup>nd</sup> year Tsinghua Medical Student Visiting Scholars.**

**Fall 2013** 4 x 2 hour classes.

**Spring 2014** 4 x 2 hour classes.

**Fall 2014** 4 x 2 hour classes.

**Spring 2015** 4 x 2 hour classes.

**10. Evidence Based Medicine, (MS1)**

**Spring 2016:** Facilitator 3 x 2 hr classes Experimental design.

**UNIVERSITY OF PITTSBURGH UNDERGRADUATE TEACHING**

**Undergraduate Honors College: Medical History Med 2101** (G. Duker, Director). Lecture Topic: Imaging Techniques as They Advance Biomedical Science.

**Spring 2002** (3 students 1.5 hr lecture)

**Spring 2004** (3 students 1.5 hr lecture)

**Spring 2005** (3 students 1.5 hr lecture)

**Spring 2007** (4 students 1.5 hr lecture)

**Spring 2010** (10 students 1.5 hr lecture)

**Spring 2011** (6 students 2 hr lecture and lab)

**Spring 2013** (8 students 2 hr lecture and lab)

**Spring 2014** (8 students, 2 hr lecture and lab)

**Spring 2015** (8 students, 2 hr lecture and lab)

**STUDENT SUPERVISION**

**1998-Present Summer Undergraduate Research Program (SURP), Cell Biology and Physiology, University Pittsburgh Medical School.** Mentored undergraduates interested in Biomedical sciences through 10+ week stipended summer research program.

Participating Students:

Katy Wack (1998-1999 Carnegie Mellon University) Pitt Cell Biology Graduate Student 2010-2014.  
Clinical Scientist Omnyx, GE Healthcare

Vasthy Zegarra (1998-1999 Washington and Jefferson University) Physical Therapist

Jamie Popovich (1999 University of Pittsburgh) PhD Biomedical Researcher

Alex Ryan (2000 Oberlin, Co-mentored with Wendy Mars) Radiologist (MD)

Christina Sander (2001 Pitt; Howard Hughes Undergraduate Fellow) Biotech/Bioengineer

Talia Kleeb (2002 Penn State) Pharm D.

Anna Romanosky (2003-2004 University of Pittsburgh) Physical Therapist  
Amy Bruecken (2003-2004 University of Pittsburgh) Dietitian  
Heipeng Zhang (2003 University of Pittsburgh) Medical Doctor (DO) Harvard University  
Jennifer Hauck (2005 Penn State) Physician Assistant  
Vijay Mittal (2006 University of Pittsburgh, Johnstown) Medical Doctor (MD) Radiology  
Angela Arbach (2006 New York University, co-mentored with Mitchell Fink). Medical Resident, NYU  
Elizabeth Iannone (2007, University of Pittsburgh). Emergency Room Medical Doctor (MD)  
Harina Vin (2009, Rice University) Medical School, Baylor.  
Carrie Rothermel Hamilton (2010, University of Pittsburgh) in Medical School, Temple.  
Robert Theiss (2012, 2013, Allegheny College) Graduate of Allegheny College, Health Promoter at Federal Clinic, Attending Pitt Medical School  
Lauren Goldschen (2013, 2014, University of Pittsburgh) Attending Pitt Medical School in 2015.  
Kelsey Pilewski (2015, University of Buffalo) Applying to Graduate Schools.

**Summer 2001 Summer Research Experience for Undergraduates. Department of Bioengineering.**  
Mentored bioengineering undergraduates through 10+ week stipended summer research program.  
(Student: Katie O'Callaghan 2003, Works for the FDA).

#### **Other Undergraduates**

Hebah Salem (Pitt) Student researcher, 1995-1997.  
Mark (Heipeng) Zhang. (Pitt) Summer Undergrad researcher 2002.  
Elizabeth Iannone (Pitt) Summer Undergrad researcher 2006.  
Ambika Hina Sharma (Oxford UK, & George Washington U. BS/Med) Researcher 2007;  
Carrie Rothermel (Pitt) 2007-2011. Student worker  
Rebecca Robbins (Summer 2009, Summer 2011, Dickinson College).  
Yaminah Romulus (Pitt, First Experiences in Research, Spring 2010, to 2014).  
Jason Stearns (CMU) Senior Fall Research Credit, 2010, Spring 2011-2014 In Medical School VTU  
Andrew Barchowsky, Pitt Johnstown, Summer 2011. Geology major  
Ryan Romanosky, 2011- 2014. Pitt main campus  
Lauren Goldschen (Spring 2012 Pitt First Experiences in Research)  
Nikki Naim, Summer 2013. SUNY Binghamton

#### **Graduate Student Mentorships:**

- Barbara Murray Fenner (2002-2004, Co-Mentored with Cristian Achim, Pathology). Currently assistant professor of Biology at King's College, Scranton, PA.
- Zahida Khan (2003-2006, MSTP student, Co-mentored with George Michalopoulos, Pathology). Currently Pediatric Gastroenterologist at Children's Hospital, Pittsburgh.
- Kathryn E. Wack (2011-2014, Co-mentored with Laura Niedernhofer, Cell Biology) Currently Clinical Scientist at Omnyx, a GE Healthcare company.

#### **Graduate Rotation Students:**

Clayton Yates  
Ee Wern Su  
Roxana Teisanu  
Martha Milton  
Barbara M. Fenner  
Zahida Khan  
Hilaire Lam  
Rohan R. Manohar

*Curriculum Vitae  
Updated August 11, 2016*

*Donna Beer Stolz, Ph.D.*

Kathryn E (Wack) Joseph  
James Zewe

### **Comprehensive examination Committees (Cell Biology and Physiology)**

Kelly Weixel  
Mark Silvis  
Roxana Teisanu  
Anna Zemke  
Kathryn Covella (withdrew from program)  
Xinxian Qiao  
Christine Klemens  
Lia Edmunds

### **Ph.D. Dissertation Committee Memberships (completed):**

- Minji Jo, Ph.D Pathology, University of Pittsburgh, (Mentor: Stephen Strom) Graduated 2000
- Tae-Hyoung Kim, Ph.D. Pathology, University of Pittsburgh, (Mentor: George Michalopoulos) Graduated 1999
- Jeff Chou M.D. Ph.D., Pathology, University of Pittsburgh (Mentor: Alan Wells) Graduated 2002, MSTP
- Barbara Murray Fenner Ph.D., Pathology, University of Pittsburgh (Co-Mentor with Cris Achim) Graduated 2004
- Albert Hwa, Ph.D, Bioengineering, MIT (Mentor: Linda Griffith) Graduated 2005
- Clayton Yates, Ph.D., Pathology, University of Pittsburgh (Mentor: Alan Wells) Graduated 2005
- Zahida Khan, M.D., Ph.D, Pathology, University of Pittsburgh, (Co-Mentor with George Michalopoulos) **Chair.** Graduated 2006, MSTP
- Jennifer Johnson, M.D., Ph.D, Pathology, University of Pittsburgh (Mentor: Jean Latimer) Graduated 2006, MSTP
- Alexa Polk Ph.D., Bioengineering, University of Pittsburgh, (Mentor: William Wagner), Graduated 2006
- Vasiliki Gkretsi, Ph.D., Pathology, University of Pittsburgh (Mentor, Cary Wu) Graduated 2006
- Joseph Moritz, Ph.D., Chemical Engineering, MIT (Mentor: Linda Griffith) Graduated 2007
- Christopher Shepard, Ph.D., Pathology, University of Pittsburgh (Alan Wells, mentor) **Chair.** Graduated 2007.
- Benjamin Cosgrove, Bioengineering, MIT (Mentor Linda Griffith) Graduated 2008
- Tiffany Sellaro, Bioengineering, University of Pittsburgh (Stephen Badylak, Mentor) Graduated 2008
- Xin He, Pathology, University of Pittsburgh (Marie C. DeFrances, Mentor) Graduated 2008
- Adam Straub, University of Pittsburgh, Environmental & Occupational Health (Aaron Barchowsky, Mentor) Graduated 2008.
- Sherrie DiVito, Immunology, University of Pittsburgh (Adrian Morelli, Mentor) Graduated 2009. MSTP
- Judson M Englert, Pathology University of Pittsburgh (Tim Oury, Mentor) Graduated 2009, MSTP
- Jianping Zhao, Pathology, University of Pittsburgh (Cary Wu, Mentor) Graduated 2009.
- Dan Wang, Pathology, University of Pittsburgh (Youhua Liu, Mentor), Graduated 2010.
- Paulina H. Liang, Pathology, University of Pittsburgh (Luyuan Li, Mentor) **Chair**, Graduated 2010

- Nisanne Ghonem, School of Pharmacy, University of Pittsburgh, (R Venkataramanan, Mentor) Graduated 2010
- Hilaire Lam, Pathology, University of Pittsburgh (Augustine Choi, Mentor, Harvard) Graduated 2011.
- Siobhan Gregg, Cell Biology and Molecular Physiology (Laura Niedernhofer, Mentor) Graduated Oct. 2011. **Chair**
- Natasha Corbitt, Pathology, University of Pittsburgh, (A. Jake Demetris, Mentor) **Chair**. Graduated 2011, MSTP
- Ta-Chun Hang, Bioengineering, MIT (Mentor, Linda Griffith), Graduated Dec 2011.
- Pavle Milutinovic, Pathology, University of Pittsburgh (Tim Oury, Mentor) ATP T32 Fellow. Graduated 7/2012. MSTP, **Chair**,
- Sarah Beckman, Pathology, University of Pittsburgh (Johnny Huard, Mentor) Graduated 11/2012.
- Marc C Hansel, Pathology, University of Pittsburgh (Steve Strom, Mentor) Graduated Nov 2012
- Prince Kwaku Awuah, Pathology University of Pittsburgh, (Paul Monga, Mentor)\*\*\*Replaced after 3 years when CATER fellowship required a Bioengineering Faculty\*\*\*\*.
- Liang-I Kang, Pathology University of Pittsburgh, (Wendy Mars, Mentor) Graduated March 2013, MSTP
- Emily Boyd Wickline, Pathology University of Pittsburgh, (Paul Monga, Mentor) Graduated Dec 2012
- Qian Sun (Katie), Pathology, University of Pittsburgh (Timothy Billiar, Mentor) Graduated 6/24/2013
- Brian Roseborough, Immunology, University of Pittsburgh (Angus Thomson, Mentor) Graduated 7/2013 MSTP
- Nina Chi Sabans, Immunology, University of Pittsburgh (Walter Storkus, Mentor) Graduated 7/2013
- Mary Beth Wilson, Biological Engineering, Carnegie Mellon University (Phil LeDuc, Mentor) Graduated 7/2013
- Jonathan Proto, Pathology, University of Pittsburgh (Johnny Huard, Mentor) Graduated 9/2013
- Brian Sicari, Pathology, University of Pittsburgh (Stephen Badylak, Mentor) **Chair** Graduated 11/2013
- Allison Bean, Bioengineering, University of Pittsburgh (Rocky Tuan, Mentor) Graduated 11/2013, MSTP
- William Veon, Bioengineering, University of Pittsburgh (Partha Roy, Mentor) ATP T32 fellow, Graduated 3/2014.
- Ebtisam El Filali, University of Amsterdam, The Netherlands, Mentor, Jurgen Seppen. Defended 4/2014.
- Kathryn E. Wack, Cell Biology and Molecular Physiology, University of Pittsburgh **Mentor**. Graduated 7/2014.
- Edgar Tafaleng, Pathology, University of Pittsburgh (Ira Fox, Mentor) **Chair**. Graduated 2/2015
- Andrew Hertsenberg, Molecular Genetics and Developmental Biology, University of Pittsburgh (Jim Funderburgh, Mentor) Graduated 4/23/2015.
- Elizabeth Oczypok (MSTP, Pathology, University of Pittsburgh, Tim Oury, Mentor) **Chair** Graduated 6/25/2015.

- Austin Nuschke (Pathology, University of Pittsburgh, Alan Wells, Mentor) **Chair**. Graduated 10/30/2015
- Hassan Awada (Bioengineering, University of Pittsburgh, Yadong Wang, Mentor) Graduated 3/22/16
- Timothy Keane (Bioengineering, University of Pittsburgh, Stephen Badylak, Mentor) Graduated 6/2016
- Johannes Kuttner (MSTP, Pathology, University of Pittsburgh, Jeffrey Isenberg, Mentor) Graduated 8/11/2016

**Ph.D. Committee Memberships (current):**

- Alexander Kikuchi (MSTP, Pathology, University of Pittsburgh, Paul Monga, Mentor)
- Ahmad Khazali (Pathology, University of Pittsburgh, Alan Wells, Mentor) **Chair**
- Vera Procaccia (Pharmacology, University of Pittsburgh, Alessandro Biselli, Mentor)
- Rochelle Fletcher (Pharmacology, University of Pittsburgh, Lin Zhang, Mentor)
- Aliyah Weinstein (Immunology, University of Pittsburgh, Walter Storkus, Mentor)
- Xu Yang (Dental School, University of Pittsburgh, Elia Beniash, Mentor)
- Jenna Dziki (Bioengineering, Stephen Badylak, Mentor)
- Tiffany Bernardo (Pathology, University of Pittsburgh, Yaakov Barak, mentor) **Chair**
- Shelby Hemler (Molecular Genetics and Developmental Biology, Jackie Ho, Mentor)

**Scholarly Project/Medical School**

- Philip Hyo Suh (summer 2014-) Vascular changes in various ERCC tissues and in cell-specific knock-outs.

**Other Students:**

**Summer High School Students:**

**Worked in my lab all summer as student workers as well as having their own mini-projects.**

- Melissa Fortin (Leominster High School, Leominster, MA) 1998-2002
- Emily Watkins (Taylor Allderdice High School, Pittsburgh, PA) 2004
- Harina Vin (Franklin Regional High School, Murraysville, PA) 2006
- Andrew Barchowsky (Mt. Lebanon High School), Mt. Lebanon, PA 2008-2011
- Latia Tucker (Creative and Performing Arts HS, Pittsburgh, PA, 2012-13) **CBI-CAPA Internship**

Phipps Art Show Botanicals (Secret Garden) March 9-April 23, 2013, and Sept-Oct 2013:

- Ben Kraemer (Creative and Performing Arts HS, Pittsburgh, PA, 2012) **CBI-CAPA Internship**
- Hanna Wells (Creative and Performing Arts HS Pittsburgh, PA) Jan 2014-present  
Phipps Art Show on SEM images of Insects used for integrated pest management (June 12-October 1, 2014). Assisted by Matt Quenaudon, integrated pest management director at the Phipps Conservatory, Pittsburgh, PA). \*Returning intern for 2016.
- Everett Ziegenfuss, (North Allegheny High School, Wexford, PA). Summer 2015, 2016

**Sci Tech Executive Experience High school interns:**

**Students worked with my lab as part of the executive experience, to learn about specific aspects of science, physics and computing. One whole academic year was spent in the lab, 2 times per week.**

- De'Andre Johnson 2012-2013

- Arthur Shelton 2013-14
- Love Wanyoike 2013-14
- Alexis Corcoran (summer 2106- 2017)

## RESEARCH

### Other Support

#### ACTIVE

**P30 DK072506** (PI: Frizzell)                    07/01/15-6/30/20                    0.60 Calendar  
 NIH    \$14,731

#### **Basic and Clinical Studies of Cystic Fibrosis**

The central aim of this core is to provide optical imaging services for the pulmonary airways and the lung.

**ERC-0812348** (PI:Borovetz)                    09/01/10-8/31/16                    0.60 Calendar  
 NSF    \$32,012

#### **Engineering Research Center**

Provide imaging support to ERC faculty and labs.

**R8883-CR07** (PI: Frizzell)                    07/1/15-6/30/20                    0.60 Calendar  
 CFF    \$15,130

#### **Research Development Program in CF – Imaging Core**

The overall goal of this project is to elucidate the mechanisms underlying Cystic Fibrosis and to discover methods for reversing the defects in this disease.

**P01 KD0969901** (PI: Perlmutter)                09/24/12-8/31/17                    1.20 Calendar  
 NIH    \$71,370**Core A: Cell and Tissue Imaging core**

In this application we will investigate the hypothesis that gain of toxic function mechanism can contribute to the pathogenesis of lung disease in ATD.

**1UH3TR000496** (PI: Griffith)                07/24/12-06/30/17                    1.20 Calendar  
 NIH    \$65,121

#### **All Human Microphysical Model of Metastasis Therapy**

The use of human liver cell perfused bioreactors to evaluate off target effects of chemotherapeutics to treat breast cancer metastases.

**1R01HD075665** (PI: Sadovsky)                09/01/12-05/31/17                    0.60 Calendar  
 NIH    \$7,349

#### **Primary Human trophoblasts and the Transfer of Viral Resistance**

The overarching goal of this application is to decipher novel mechanisms utilized by human placental trophoblasts to resist viral infections and to communicate antiviral signals locally and systemically.

**R01 CA172136** (PI: Zhang)                    04/01/13-03/31/18                    0.36 Calendar  
 NIH    \$4,597

#### **Mechanism and cell target of NSAID-mediated tumor prevention**

We have been investigating the mechanisms of NSAID-mediated chemoprevention with the long-term objective of developing improved strategies for reducing cancer risk.

**P01 AG043376** (PI: Robbins)                    07/01/13-06/30/18                    0.60 calendar  
NIH    \$7,379

**Cell Autonomous and Non-Autonomous Mechanism of Aging (Core C)**

We will investigate the role that unresolved DNA damage plays in age-related pathologies

**1R01 ES023696:** (PI: Barchowsky)            12/01/13-11/30/18                    0.60 Calendar  
NIH    \$12,228

**Mechanisms of arsenic-induced muscle morbidity and reduced regenerative capacity.**

Advancing the mechanistic understanding of arsenic effects on muscle maintenance, stem cells, and healing capacity in the etiology of arsenic-induced muscle weakness and fatigue will aid in the design of strategies for improving outcomes in patients in arsenic endemic areas and increasing basic knowledge of mechanisms through which environmental exposures impair stem cell function.

**P01 HL114453.** (P.I. Mallampalli)            01/01/14-12/31/18                    0.60 calendar  
NIH    \$14,600

**Cardiolipin as a Novel Mediator of Acute Lung Injury**

This PPG application is based on our seminal discovery that a critical mitochondrial-specific lipid, cardiolipin, profoundly produces ARDS-like features when released into the extracellular environment.

**R01 DK097241.** (P.I. Lowe)                    04/15/14-3/31/17                    0.0 calendar  
NIH    \$5,000

**Proteotoxicity in the Pathophysiology of Chronic Pancreatitis**

Evaluating the role of carboxyl ester lipases and associated mutants in progression of chronic pancreatitis.

**GM0441100** (PI Billiar)                        04/01/14-03/31/19                    0.24 calendar  
NIH    \$10,828

**Nitric Oxide and hepatic Function in Sepsis and Trauma**

Evaluate the role NO plays in favorable/unfavorable outcomes in sepsis and trauma in various organs.

**1R01DK10437:** (PI: Bates)                    07/01/15-06/30/20                    0.48 Calendar  
NIH    \$6,080

**Critical Roles for Fibroblast Growth Factor Receptors in Bladder**

Evaluate how FGFR signaling is involved in development

**VMI Pilot** :                                        07/01/15-06/30/17                    0.00 Calendar  
VMI Institute    \$25,000

**The role of plasmonic thrombospondin-1 signaling in the regulation of red blood cell homeostasis**

**U19 AI068021-11** (PI: Greenberger)            09/01/15-08/30/20                    0.60 Calendar  
NIH-    \$7,355

**Mechanisms-Directed Sequential Delivery of Radiation Mitigators, Imaging Radiation Pathology Core**

**1R01 ES025529-01A1:**(PI: Ambrosio/Barchowsky) 02/01/16-01/31/20      1.20 Calendar  
NIH    \$19,890

**Dysfunctional Muscle Remodeling and Regeneration in Environmental Disease**

Affect of Arsenic on the ability of muscle stem cells to potentiate muscle regeneration

**R01 HL127711** (PI: Kwiatkowski)    04/01/16-03/31/21      0.6 Calendar  
NIH    \$7,539

**Alpha-catenin function in cardiomyocyte adhesion and cytoskeletal organization**

**PENDING**

**Not Assigned:** (PI: Goetzman)    09/1/16-08/31/21      0.6 Calendar  
NIH    \$22,844

**Modulation of Peroxisome Function By Sirtuins**

**R01 Not Assigned:** (PI: Liu)    09/1/16-08/31/21      0.24 Calendar  
NIH    \$8,767

**Nanoscale Imaging of Cell Nucleus to predict Cancer Progression in IB colitis**

**Not Assigned:** (PI: Roy)    10/1/16-9/30/18      0.6 Calendar  
NIH    \$15,867

**Novel regulators of diabetic retinopathy**

**S10 Not Assigned**    02/01/17-01/31/18      0.0 Calendar  
NIH    \$315,472

**Leica EM ICE High Pressure Freezer and AFS2 Freeze Substitution System.**

**Not Assigned:** (PI: Swiateck-Urban)    04/01/17-03/31/22      0.6 Calendar  
NIH    \$11,010

**Novel Pathways in TGF BETA Signaling**

Elucidate the role of TGF-beta in the trafficking pathways of the Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) in order to identify a therapeutic target for the fatal disease, cystic fibrosis.

**Not Assigned:** (PI: Friedlander)    04/01/17-03/31/22      0.12 Calendar  
NIH    \$5,000

**Melatonin Biosynthesis in Neuronal Mitochondria**

**R01 (PI: Barak)**    04/01/17 - 03/31/2      0.24 Calendar  
NIH    \$9,000

**The Placental Phenome Initiative**

**Editorial Board:**

**2010-present:** Cell Transplantation: The Regenerative Medicine Journal. Hepatocyte section.

**Current Research Interests:**

Signal transduction relating to mitogen-stimulated motility events in parenchymal (hepatocytes) and non-parenchymal (epithelial and endothelial) cells of the liver during liver regeneration. Angiogenesis of the liver following partial hepatectomy. Endothelial cell proliferation and motility. Effect of extracellular matrix on the above phenomena. Ultrastructural evaluation of liver during various physiological states. Artificial Liver bioreactors. Repopulation of endothelium following ischemia/reperfusion injury of liver, intestine and kidney. Stem cell involvement in I/R injury recovery. Novel organellar protein trafficking in hepatocytes. Role of HIF and regulatory enzymes in liver remodeling, angiogenesis. Mechanisms of aging in kidney in liver and vasculature in general.

**Invited Speaking Engagements**

1. **DB Stoltz**, Gregory Bannish & Bruce S. Jacobson. 1991. Transmembrane Protein Polarity of Subconfluent Bovine Aortic Endothelial Cells (BAECs) In Vitro. Fifth World Congress For Microcirculation. Louisville, KY. August 31-September 5, 1991.
2. **DB Stoltz**, & George K. Michalopoulos. 1994. Differential effects of HGF and EGF on the mitogenesis, motility, morphology and cytoskeletal signal transduction in primary rat hepatocytes. FASEB J. 8(5)pt.2: A1020, #5908.
3. **DB Stoltz** and George Michalopoulos, 1995. Rho A and focal adhesion kinase are upregulated during stimulation of hepatocyte and liver epithelial cell motility. FASEB J. 9(3)pt.1:A1, #2.
4. **DB Stoltz**. 1998 Endothelial extracellular matrix during liver regeneration. Blood Vessel Club. NAVBO. San Francisco, CA. April 18, 1998.
5. **DB Stoltz**, M.A. Ross, H.M. Salem, W.M. Mars, and G.K. Michalopoulos. 1998. Morphological and Extracellular Matrix changes at the sinusoidal surface during endothelial cell proliferation following partial hepatectomy. FASEB Summer Research Conference on Liver Pathobiology, Snowmass, CO July11-16, 1998.
6. **DB Stoltz** Liver Regeneration as a Model for Physiologic Angiogenesis. Cell Biology and Physiology, University of Pittsburgh Med. School. January 19, 2000
7. **DB Stoltz** Liver Regeneration as a Model for Physiologic Angiogenesis. Molecular and Cellular Biology Program, University of Massachusetts, Amherst, MA. April 25, 2000
8. **DB Stoltz** Liver Regeneration as a Model for Physiologic Angiogenesis. Dept. of Chemical Engineering, MIT, Cambridge, MA October 24, 2000.
9. **DB Stoltz**. Angiogenesis designs for Liver Regeneration. August 2001, Gordon Conference, Holderness, NH. Biomaterials. Biocompatibility and Tissue Engineering.
10. **DB Stoltz** Revascularization of the regenerating liver. April 21, 2002. In Vascularization of Parenchymal Organs, ASIP, FASEB, New Orleans.
11. **DB Stoltz** Revascularization of the regenerating liver, MIRM Wound Healing Seminar, Fall session 2003.
12. **DB Stoltz** Mechanisms of angiogenesis in the liver. Pathology Liver Seminar Series, University of Pittsburgh. 2006
13. **DB Stoltz** Mechanisms of angiogenesis in the liver. March 24, 2006. Dept. Biological Sciences, Duquesne University.

14. Liu S, **Stolz DB**, Sappington PL, Macias CA, Killeen ME, Tenhunen JJ, Delude RL, Fink MP. HMGB1 is Secreted by Immunostimulated Enterocytes and Contributes to Cytomix-induced Hyperpermeability of Caco-2 Monolayers. Innate Danger Signals and HMGB1. Milan, Italy. Feb. 6-12, 2006.
15. **Stolz, DB**. Novel Imaging Technologies. MIRM Retreat, Nemacolin Resort. March 5, 2007.
16. **Stolz, DB** Limits of Electron Microscopy. MIRM Retreat, Nemacolin Resort. March 9, 2009.
17. **Stolz, DB**. Working your way through graduate school and your post-doc: making the most of the experience. Presentation to the Summer Undergraduate programs at Duquesne University. July 20 2009.
18. **Stolz, DB**, MA Ross, K Tomiyama, H Toyokawa, L Li, N Murase. Events contributing to rat liver vascularization following partial hepatectomy. Experimental Biology 4 18, 2009.
19. **Stolz, DB**, J Franks. Invited lecturers for "Words and Images", a class taught at U. Pitt-Titusville by Dr. Cindy Andes. "Science and Art" September 29, 2009.
20. **Stolz, DB**, J Franks. Invited lecturers for "Words and Images", a class taught at U. Pitt-Titusville by Dr. Cindy Andes. "Science and Art" October 21, 2010
21. **Stolz, DB**, J Franks. Invited lecturers of Microscopy-related subjects for Biology Club at U. Pitt-Titusville by Dr. Nancy Tress. October 21, 2010.
22. **Stolz, DB**, Progeroid mouse model to study age-related kidney dysfunction. Renal Seminar Series, University of Pittsburgh. May 11, 2011.
23. **Stolz, DB**. Working your way through graduate school and your post-doc: making the most of the experience. Presentation to the Summer Undergraduate programs at Duquesne University. July 15, 2011.
24. **Stolz, DB**. Progeroid Mouse Model to Study Age-related Kidney Dysfunction. Cell Biology and Physiology Retreat September 9, 2011.
25. **Stolz, DB** Interdisciplinary Biomedical Graduate program Admissions seminar. University of Pittsburgh. Jan 20, Feb 3, 17, March 2, 16, 2011.
26. **Stolz, DB** Career Choices with a Biochemistry degree. University of Massachusetts, Amherst. Nov 1, 2013.
27. **Stolz, DB**. Chronic Kidney Disease in the ERCC-1 deficient mouse model of accelerated aging. Cell Biology Department Retreat, University of Pittsburgh. September 19, 2014
28. **Stolz, DB** Imaging Alpha-1 antitrypsin Disease. Albert Einstein College of Medicine. Bronx, NY. Nov. 5, 2014.
29. **Stolz, DB** Career Choices with a Biochemistry degree. University of Massachusetts, Amherst. Nov 14, 2014.
30. **Stolz, DB** Career Choices with a Biochemistry degree. University of Massachusetts, Amherst. Nov 12, 2015.
31. **Stolz, DB**. Keynote Speaker, Duquesne University Biological Sciences Retreat. August 20, 2016. "Not all who wander are lost: My story of navigating the world of Biomedical Science as a Cell Biologist"

## COLLABORATORS (past and present)

### Department Wide:

Joseph Pilewski, M.D.  
Simon Watkins, Ph.D.  
Ray Frizzell, Ph.D.  
Kathi Peters, Ph.D.  
Peter Drain, Ph.D.

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Agnieszka Swiatecka-Urban, M.D.

**University Wide:**

**Pathology:**

George K. Michalopoulos, M.D., Ph.D.  
Stephen Strom, Ph.D.  
Wendy M. Mars, Ph.D.  
Alan Wells, M.D., D.M.Sc.  
Cary Wu, Ph.D.  
Jianhua Luo, Ph.D.  
Youhua Liu, Ph.D.  
Paul Monga, M.D.

**Medicine:**

David Whitcomb, M.D., Ph.D.  
Anthony Kanai, Ph.D.  
Neil Resnick, M.D.  
Steven Shapiro, M.D.  
A McGarry Houghton, M.D. (Now at Fox Chase)  
Janet S. Lee, M.D.  
Rama Mallampalli, M.D.

**Surgery:**

Timothy Billiar, M.D.  
Yoram Yodovitz, Ph.D.  
Noriko Murase, M.D. (Left University 2012)  
David Geller, M.D.  
Prabir Ray, Ph.D.  
Anurhada Ray, Ph.D.  
Anthony J. Demetris, M.D. (Also Pathology)  
Allan Tsung, M.D.

**Pharmacology:**

Bruce Freeman, Ph.D.  
Guillermo Romero, Ph.D.  
Adam Straub, Ph.D.

**Pharmaceutical Science:**

Song Li, Ph.D.

**Grad School of Public Health:**

David Finegold, M.D.  
Phalguni Gupta, Ph.D.

**Environmental and Occupational Health:**

Bruce R. Pitt, Ph.D.  
Aaron Barchowsky, Ph.D.  
Valerian Kagan, Ph.D.  
Claudette St. Croix, Ph.D.

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**Physical Medicine and Rehabilitation**  
Fabrisia Ambrosio, Ph.D., M.P.T.

**University of Pittsburgh School of Dental Medicine**  
Charles Sfeir, DDS, Ph.D.  
Elias Beniash, Ph.D.

**Magee-Womens:**

Pamela Moalli, M.D.  
Carl Huber, Ph.D.  
Sharon Hilliar, Ph.D.  
Yacov Barak, Ph.D.  
Richard Challiet, M.D.  
Yoel Sadovsky, M.D.

**Children's Hospital of Pittsburgh**

David Perlmutter, M.D.  
David Hackam, M.D., Ph.D.  
Jacqueline Ho, M.D.  
Edward Prochownik, M.D., Ph.D.  
Gary Silverman, M.D., Ph.D.  
Ira J. Fox, M.D.  
Sunder Sims-Lucas, Ph.D.  
Eric Goetzman, Ph.D.

**McGowan Institute of Regenerative Medicine:**

Steve Badylak, Ph.D., M.D., D.V.M.  
Joerg Gerlach, M.D., Ph.D.  
William Wagner, PhD  
Kacey Marra, Ph.D. (Bioengineering)  
Eric Lagasse, Ph.D.  
Paulo Fontes, M.D.

**Molecular Genetics and Microbiology:**

Robert Montelaro, Ph.D.  
Paul Robbins, Ph.D. (Adjunct, now at Scripps, Jupiter, FL)  
Laura Niedernhofer, MD, PhD (Adjunct, now at Scripps, Jupiter, FL)  
Gary Thomas, Ph.D.  
Jennifer Bomberger, Ph.D.  
Carolyn Coyne, Ph.D.

**Eye and Ear Institute**

B.J. Ferguson, M.D.  
Jim Funderburgh, Ph.D.  
Michael Steketee, Ph.D.

**UPCI**

Shiyuan Cheng, Ph.D. (Currently at Northwestern)

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Laura Niedernhofer, M.D., Ph.D. (Adjunct, now at Scripps, Jupiter, FL)  
Bennett Van Houten, Ph.D.  
Hannah Rabinowich, Ph.D.  
Yang Liu, Ph.D.  
Stephen Thorne, Ph.D.

**External (national and international):**

Robert H. Costa, Ph.D.  
University of Illinois at Chicago, College of Medicine, Chicago, IL  
(Deceased, September 1, 2006)

Linda G. Griffith, Ph.D.  
Massachusetts Institute of Technology, Cambridge, MA

Douglas Lauffenburger, Ph.D.  
Massachusetts Institute of Technology, Cambridge, MA

Wei Duan, Ph.D.  
Deakin University, Geelong, Waurn Ponds, Victoria Australia

Lester Lau, Ph.D.  
University of Illinois at Chicago, College of Medicine, Chicago IL

Terry Unterman, Ph.D.  
University of Illinois at Chicago, College of Medicine, Chicago. IL

James Crawford, M.D., Ph.D.  
University of Florida Medical Center, Gainesville, Fl, now at Hofstra University, NY.

Peter Castric, Ph.D  
Duquesne University, Pittsburgh, PA

Lina Lu, Ph.D.  
Cleveland Clinic, Cleveland, OH

Katsuhiko Enomoto, M.D., Ph.D.  
Akita University Medical School, Akita, Japan

Leonidas Koniaris, M.D.  
Thomas Jefferson University, Philadelphia, PA.

David Dichek, M.D.  
University of Washington, Seattle, WA

Junichi Ikenouchi, M.D., Ph.D.  
Graduate School of Engineering, Kyoto University, Japan.

Danith Ly, Ph.D.  
Carnegie Mellon University, Pittsburgh, PA

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Philip LeDuc, Ph.D.  
Carnegie Mellon University, Pittsburgh, PA

Burak Ozdogandlar, Ph.D.,  
Carnegie Mellon University, Pittsburgh, PA

Nilam S. Mangalmurti, M.D.  
University of Pennsylvania, Philadelphia, PA

Hugo Rosen, M.D.  
University of Colorado, CO

## SERVICE

### **University of Pittsburgh/UPMC:**

#### **1997-present: Associate Director, Center for Biologic Imaging (CBI)**

Directly manage the electron microscopy arm of the facility (transmission and scanning electron microscopy). Interacting with faculty, student, fellow and outside staff users with design and interpretation of imaging data, use of equipment, as well as assist users with manuscript and grant writing relative to imaging their imaging needs. Principal control for overseeing staff within the facility and the day-to-day running of the state of the art imaging facility ([www.cbi.pitt.edu](http://www.cbi.pitt.edu)). Arrange and coordinate financial support from user investigators relevant to my expertise as well as taking a lead role in writing shared instrumentation grants to upgrade and expand microscope facilities to user investigators. Primary control for interface between CBI and the outside worlds, for example in the supply of images for Academic Affairs publications including the annual report and various University of Pittsburgh publications (PittMed, Pitt Magazine, Pitt Chronicle and Pitt Times) as well as various outreach programs. Running P.R. and promotion for the facility, including setting up scientific art shows displaying images obtained by CBI staff and users. Provide tours to potential MD, PhD and MD/PhD students and faculty and visiting scientists.

#### **2004-Present. Co-director (with Simon Watkins) of Multiparametric Microscopic Imaging MSCBMP 2860**

#### **2009-present Co-director with Claudette St. Croix.**

Summer survey course on all modes of optical and electron microscopy.

#### **2006-2011: Director, Summer Undergraduate Research Program (SURP), Cell Biology and Physiology**

Coordinate the summer research program for the department of Cell Biology and Physiology. This highly competitive, 10 week summer research program is a mechanism to attract the best undergraduate researchers to matriculate in the Interdisciplinary Graduate Program. Involved in screening applications, recruiting mentors, overseeing seminar series and final presentations.

#### **2009-2012: Interdisciplinary Biomedical Graduate Committee Admissions Committee**

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- **2009-2012:** Member. Reviewing graduate school applications for IBGP.
- **2010-2011:** Member, Assistant Chair
- **2011-2012:** Member, Chair.

**2010-2012: Recruiting for Biomedical Graduate Committee:** 5 College Career Fair, University of Massachusetts, Amherst, MA.

**June 2010-April 2012: Assistant Director, Cell Biology and Molecular Physiology Graduate Program.** Assist director with running of graduate program. Attend meetings in his absence.

**April 2012-present, Director, Cell Biology and Molecular Physiology Graduate Program.** Oversee graduate student progress in the CBMP program.

**2010-2015: Tour guide for Interdisciplinary Biomedical Graduate Program Admissions Committee.** Redesigned (with MD/PhD student David Wheeler in 2009) and lead the Saturday tours for IBGP recruits. (5 Saturdays Jan-March, 9:00 am-5:00 pm). Coordinate tour guides from each program to attend the bus tour, arrange security access and graduate student tour guides for satellite facilities including the Magee-Womens Research Institute, Zebrafish facility, CBI, Hillman Cancer Center, Children's Hospital Rangos Research Center, Bridgeside Point II.

**2013 (April and May): Misconduct Inquiry Committee, Chair.**

### **Science as Art**

**2006-present: Curator of Science Symposia's Science as Art Shows.**

Curating art shows in coordination with the Academic Affairs Office (Dr. Maggie McDonald) during the two-day Science Symposium every October. (visit some of the shows at [www.cbi.pitt.edu/gallery/index.html](http://www.cbi.pitt.edu/gallery/index.html))

- **Science2006: Images from the Center for Biologic Imaging Archives.** A series of 18 images selected by the staff of the CBI for display.
- **Science2007: Periodic Table of Amino Acids.** Polarized light images of re-crystallized amino acids as well as other well-known chemicals (cholesterol, acetominophen, citrulline, imidazole, etc.).
- **Science2008: Periodic Table of Electron Microscopy.** "What would Mendeleev do?" Each of the 118 element panels is re-represented with an image captured using one of a variety of electron microscopy modalities.  
<http://www.cbi.pitt.edu/gallery/Elements/index.html>
- **Science2009: Photomicroscopy Mosaics.** A series of well-known pieces of art that were recreated as 14 photo-mosaics using images collected by CBI over the past 10 years. Pieces included: DaVinci's Mona Lisa, Seurat's Sunday Afternoon on the Island of La Grande Jatte, Grant Wood's American Gothic, and O'Keefe's Ram's Head as well as the University's Cathedral of Learning.  
<http://www.cbi.pitt.edu/gallery/Mosaic/index.html>

- **Science2010: From Benchtop to Bedtop.** A display of 9 handmade pillows from various artists with a scientific bent. University wide (and beyond) participation.  
<http://www.cbi.pitt.edu/gallery/Pillows/index.html>
- **Science2011: Get your Rotors Runnin'.** A re-commissioning of de-commissioned centrifuge rotors as heavy metal art. A total of 21 rotors were decorated by various members of the University of Pittsburgh community.
- **Science2012: Cellular Terpsichore** Movies made at CBI put to music (Overseen by Jonathan Franks, M.S.).
- **Science2013: What does personalized medicine mean to you?** Multi-media show.
- **Science2014: Sustain it!** Taking the mantra “reuse, reduce, recycle, repurpose” to make art. Partnered with the Pittsburgh Center for Creative Reuse.
- **Science2015: Images of Fighting Cancer** (Ben Van Houten, Jonathan Franks with UPCI). Reshowing of the University of Pittsburgh Cancer Institute “Fighting Cancer” Image Competition.
- **Science2016: “Game Changers”** Introduce the audience to Nobel Prize winning ideas that impacted modern microscopy.

#### **Molecularart: McGowan Institute for Regenerative Medicine**

Curated art shows that accompany **the McGowan Institute's** Distinguished Lectureship's receptions.

- **2006: Images from the Center for Biologic Imaging Archive.** Accompanied by a matching competition for participants. Winner picked one image panel to bring home.
- **2009: Periodic Table of Electron Microscopy** (see Science2008, above). Accompanied by a competition inspired by Sesame Street’s “one of these things is not like the other”. Participants needed to choose which of each list of 4 images was not like the other three and indicate why. Winner picked one image panel to bring home.

#### **Images of Fighting Cancer** (with Ben van Houten and Jonathan Franks)

University of Pittsburgh Cancer Institute (UPCI) competition and includes a variety of works capturing intercellular battlefields as captivating visual pieces. Also the theme for Science 2015. The works will be on permanent display at UPCI's Hillman Cancer Institute starting October 2015.

#### **Art OUTREACH**

##### **HeLa Reflected Art Show**

**October 1, 2011:** Curated HeLa Cell-centric image art show for the 60<sup>th</sup> Anniversary of HeLa, Henrietta Lacks Memorial Lecture Series, Johns Hopkins Medical School, Johns Hopkins Institute for Clinical and Translational Research.

### **Phipps Conservatory**

1. Photomicrographs to accompany the Spring Flower Show "The Secret Garden"

**March 9-April 23, 2013, and Sept-Oct 2013:** Curated photomicrographs of CBI and the CAPA High School interns Latia Tucker (as rising senior) and Ben Kraemer (as rising Junior) in the Phipps Lobby.

2. Photomicrographs of insects to highlight the Phipps' Integrated Pest Management program. High School Intern Hanna Wells (freshman, CAPA) featured artist. **June 10- August, 2014.**

### **Other Art shows/competitions:**

ASCB Dulles Airport Arts show, Life: Magnified, June – November 2014. Hepatocyte Flower image in show.

ASCB Philadelphia Airport Arts Show, Life: Magnified. August-December 2014. Hepatocyte image and Moth antenna.

Olympus BioScapes honorable mention photomicrograph	2006
Nikon Small World 2 <sup>nd</sup> and 19 <sup>th</sup> place winner photomicrographs	2011
Nikon Small World Honorable Mention photomicrograph	2012
Nikon Small World Winner, Image of Distinction	2015
Outreach: The Art of Systems Biology and Nanoscience, University of New Mexico	2016

### **1995-2000 Young Women in Science Day, UPMC**

Co-Developer (with Wendy Mars)/Instructor of the protein concepts module. Instructed 100 seventh grade girls in the basic concepts of Surgery/Animal Models, Microbiology and Protein Biochemistry used in contemporary biomedical science. Designed protein separation experiment using gel exclusion chromatography and did various enzymatic assays on separated fractions. The entire experiment was run and evaluated in one hour. The day was designed to encourage girls from inner city schools to pursue careers in science fields. Designed and set up all hands-on labs. Hand-outs and lectures,

- April 1995** 100 students (33 students x 3 x 1 hr lecture/lab)
- April 1996** 100 students (33 students x 3 x 1 hr lecture/lab)
- April 1997** 100 students (33 students x 3 x 1 hr lecture/lab)
- April 1998** 100 students (33 students x 3 x 1 hr lecture/lab)
- April 1999** 100 students (33 students x 3 x 1 hr lecture/lab)
- April 2000** 100 students (33 students x 3 x 1 hr lecture/lab)

### **Grant Reviewer for Competitive Medical Research Foundation (CMRF) UPMC**

**2006- present.** University of Pittsburgh CMRF reviewer

### **Grant Reviewer for Clinical and Translational Science Institute (CTSI)**

**WCRC Program** 2012-present

**VMI Program** 2012-present

### **EXTERNAL ACADEMIC SERVICE:**

#### **Grant Reviews:**

**2001** Served as a Scientific Reviewer (grants) for Israel Science Foundation (mail review).

**2002** Ad Hoc Reviewer for NIH Study Section, General Medicine A Subcommittee 2 (mail review).

**2008** (November) Ad hoc P30 Special Emphasis Review Panel (Imaging cores reviewer for ZDK1 GRB-8 M2 1; 2 core grants) NIDDK  
**2009** (April 7) Ad hoc P01 reviewer (Imaging cores reviewer for ZDK1 GRB-8 M2 1; 1 grant) NIDDK  
**2009** (April 13-14) Ad hoc reviewer for Silvio Conti Digestive Diseases Centers Special Emphasis Panel (5 imaging core grants) NIDDK.  
**2009** (October 27-29) NIEHS Ad Hoc Reviewer Superfund Research Training Program. (ZES1-LWJ-M (01) Phone review of 1 grant.  
**2010** (March 25-26) Ad hoc reviewer for Silvio Conti Digestive Diseases Centers (6 imaging and core grants) NIDDK. ZDK1 GRB-8-M1  
**2011** NIDDK GRB-8 (J1) December 2 –Digestive Diseases Core Centers Meeting (4 imaging core grants).  
**2014** (April 3-4) Ad hoc reviewer for Silvio Conti Digestive Diseases Centers (6 imaging and core grants) NIDDK ZDK1-GRB-8-M2  
**2014** (July) Ad hoc reviewer for S10 Shared Instrumentation grants, Electron Microscopy. S10 ZRG1 CB-D (30). 7 EM grants to review.  
**2015** (March 26-27) Ad hoc reviewer. Silvio O. Conte Digestive Diseases Research Core Centers. 7 imaging core grants. NIDDK ZDK1-GRB-8-M2  
**2015** (July 16). ZDK1 GRB-7 O1 (review of NIH NIDDK R13/U13 grants) 1 meeting grant.  
**2015** (November 23) ZDK1 GRB-8 J1 review of NIH NIDDK P01 special emphasis grants) 1 meeting grant, phone meeting.  
**2016** (March 3) ZDK1 GRB-8 M21 review of NIH NIDDK P01 grants 1 meeting grant, phone meeting.

#### **NON-ACADEMIC SERVICE**

**1998-present:** Founding board member with Wendy Mars, Ladies Liver Auxiliary. International research/social group with interests in liver biology (currently over 200 members).

**2007-present,** Rachel Carson Trails Conservancy Board member and Public Relations committee member. Volunteer Coordinator. Hike leader. Trail maintainer.

**January 2016- 2019, (3 year term).** Pittsburgh Center for Creative Reuse. Board member. Member of Grants and Development subcommittee.

**Serve at Christmas Day.** Assisted at Christmas day at Pitt 1-4 pm, Dec 25, 2015.