William Parker, Ph.D. CEO, WPLab, Inc. A 501(c)(3) non-profit Durham, NC 27710 WPLaboratory.org

Education

B.S. Biology, University of Arkansas, Little Rock, AR. 1987 B.A. Chemistry, University of Arkansas, Little Rock, AR. 1987 Ph.D. Chemistry, University of Nebraska, Lincoln, NE. 1992

Research Interests

- •Inflammatory diseases of Western Society: Education and public outreach
- •The Biota Alteration Theory: The role of helminths in "normal" immune and neuropsychiatric function
- •Gut Immunity: The support of microbial growth by the immune system
- •Protein folding: Conserved protein sequence motifs which potentially form either permanent or transient α-helices during the folding of most proteins.

Employment history

- •Course instructor for senior undergraduate and graduate level biochemistry, University of Nebraska, Lincoln. 1993
- •Research Associate, Duke University Medical Center, Department of Surgery, Durham, NC. 1993-1994
- •Assistant Research Professor in Surgery, Duke University Medical Center, 1995-2000
- •Assistant Professor in Surgery, Duke University Medical Center, 2000-2011
- •Associate Professor in Surgery, Duke University Medical Center, 2011-2021
- •Director, Duke Transplant Research Laboratory, 2018-2020
- •Executive Director, Immunity's Forge, a non-profit organization supporting research on the human biome, 2013-2020.
- •Chairman, WormStar Mutualistic Helminths (2019-2021), and XPara Mutualistic Helminths (2022-present), LLCs aimed at utilizing Duke University owned technology to make helminth therapy widely available.
- •CEO, WPLab, Inc. a non-profit organization supporting research on the human biome and on chronic inflammatory conditions, 2021-present

Awards, honors, professional and honorary organizations

- •University of Arkansas Scholars Program, 1983-1987
- •Weyerhaeuser Foundation National Merit Scholar, 1983-1987
- •Outstanding undergraduate research award, 1987
- •Secretary, Rho chapter, Phi Lambda Upsilon, Honorary Chemistry Society 1989-90
- •Outstanding graduate teaching award, 1992
- •Listed in the 100 top science stories of 2007 by Discover Magazine for determination of the apparent function of the human appendix
- •Listed in the 70 top ideas of 2007 by The New York Times Magazine for determination of the apparent function of the human appendix
- •Board member, Triangle Center for Evolutionary Medicine, 2017-present

Publications

Summary: 147 peer reviewed research articles and 47 other publications (194 total)

Peer reviewed publications

- 1. Choi, J.-K., Kim, I.-S., Kwon, T.-I., **Parker, W**., & Song, P.-S. (1990) Spectral Perturbations and Oligomer/Monomer Formation in 124-Kilodalton *Avena* Phytochrome. *Biochemistry* **29**, 6883-6891.
- 2. **Parker, W.**, & Song, P.-S. (1990) Location of Helical Regions in Tetrapyrrole-containing Proteins by a Helical Hydrophobic Moment analysis. *J. Biol. Chem.* **265**, 17568-17575.
- 3. **Parker, W.**, Partis, M. & Song, P.-S. (1992) N-terminal domain of *Avena* Phytochrome: Interactions with Sodium Dodecyl Sulfate Micelles and N-terminal Chain Truncated Phytochrome. *Biochemistry* **31**, 9413-9420.
- 4. **Parker**, W., & Song, P.-S. (1992) Protein Structures in SDS Micelle-protein Complexes. *Biophys. J.* **61**, 1435-1439.
- 5. Chen, E., **Parker, W**., Lewis, J., Song, P.-S. & Kliger, D. (1993) Ultra-Violet Time Resolved Circular Dichroism of Phytochrome: the Folding of the N-terminus. *J. Am. Chem. Soc.* **115**, 9854-9855.
- 6. **Parker, W.**, Goebel, P., Ross, C.R. II, Song, P.-S. & Stezowski, J.J. (1994) Molecular Modeling of a Phytochrome Using Constitutive C-phycocyanin from *Fremyella diplosiphon* as a Putative Structural Template. *Bioconjugate Chemistry* **5**, 21-30.
- 7. Collins, B.H., **Parker, W**. & Platt, J.L. (1994) Characterization of Porcine Endothelial Cell Determinants Recognized by Human Natural Antibodies. *Xenotransplantation* 1, 36-46.
- 8. **Parker, W.**, Bruno, D., Holzknecht, Z.E. & Platt, J.L. (1994) Characterization and Affinity Isolation of Xenoreactive Human Natural Antibodies. *J. Immunol.* **153**, 3791-3803.
- 9. **Parker, W.**, Wells, T.A., Meza-Keuthen, S. & Song, P.-S. (1995) Purification and Characterization of a 60-kDa Protein from Oat, Formerly Known as a TCP1-Related Chaperone. *J. Prot. Chem.* **14**, 53-57.
- Collins, B.H., Cotterell, A.H., McCurry K.R., Alvarado, C.G., Magee, J.C., Parker, W. & Platt, J.L. (1995) Cardiac Xenografts Between Primate Species Provide Evidence for the Importance of the α-Galactosyl Determinant in Hyperacute Rejection. *J. Immunol.* 154, 5500-5510.
- 11. Cotterell, A.H., Collins, B.H., **Parker, W**., Harland, R.C. & Platt, J.L. (1995) The Humoral Immune Response in Humans Following Cross-Perfusion of Porcine Organs. *Transplantation* **60**, 861-868.
- 12. Parker, W., Lundberg-Swanson, K., Holzknecht, Z.E., Lateef, J., Washburn, S., Braedehoeft,

- S.J. & Platt, J.L. (1996) Isohemagglutinins and xenoreactive antibodies: members of a distinct family of natural antibodies. *Human Immunol.* **45**, 94-104.
- 13. **Parker, W**. & Stezowski, J.J. (1996) Occurrences of Sequences with Amphiphilic α-helical Potential in β-sheet Proteins May Reveal Structural Features Important for Protein Folding. *Proteins* **25**, 253-260. (Featured on the cover of the journal issue.)
- 14. Kooyman, D.L. McClellan, S.B., **Parker, W**., Avissar, P.L., Velardo, M.A, Platt, J.L. & Logan, J.S. (1996) Identification and Characterization of α Galactosyl Peptide Mimetic. *Transplantation* **61**, 851-855.
- 15. Lin, S.S., **Parker, W**., Holzknecht, Z.E. & Platt, J.L. (1996) Quantitative Evaluation of Porcine Endothelial Cell Antigens Recognized by Human Natural Antibodies: An Analysis by Western Blotting. *Xenotransplantation* **3**, 120-127.
- Yu, P.B., Holzknecht, Z.E., Bruno, D., Parker, W. & Platt, J.L. (1996) Modulation of Natural IgM Binding and Complement Activation by Natural IgG Antibodies: A Role for IgG Anti-Galα1-3Gal Antibodies. J. Immunol. 157, 5163-5168.
- 17. **Parker, W**., Lateef, J., Everett, M.L. & Platt, J.L. (1996) Specificity of Xenoreactive Anti-Galα1-3Gal IgM for α-Galactosyl Ligands. *Glycobiology* **6**, 499-505.
- 18. **Parker, W**., Yu, P.B., Holzknecht, Z.E., Lundberg, K., Buckley, R.H. & Platt, J.L. (1997) Specificity and Function of "Natural" Antibodies in Immunodeficient Subjects: Clues to B-Cell Lineage and Development. *J. Clin. Immunol.*, **17**, 311-321.
- Lin, S.S., Kooyman, D.L., Daniels, L.J., Daggett, C.W., Parker, W., Lawson, J.H., Hoopes, C.W., Gullotto, C., Li, L., Birch, P., Davis, R.D., Diamond, L.E., Logan, J.S. & Platt, J.L. (1997) The Role of Natural Anti-Galα1-3Gal Antibodies in Hyperacute Rejection of Pig-to-Baboon Cardiac Xenotransplants. *Transplant Immunol.*, 5, 212-218.
- 20. McCurry, K.R., **Parker, W**., Cotterell, A.C., Weidner, B.C., Lin, S.S., Daniels, L.J., Holzknecht, Z.E. & Platt, J.L. (1997) Humoral Responses in Pig-to-Baboon Cardiac Transplantation: Implication for the Pathogenesis and Treatment of Acute Vascular Rejection and for Accommodation. *Human Immunol.*, **58**, 91-105.
- 21. **Parker, W.**, Holzknecht, Z.E., Song, A., Blocher, B.A., Bustos, M., Reissner, K.J., Everett, M.L. & Platt, J.L. (1998) The Fate of Antigen in Xenotransplantation: Implications for Acute Vascular Rejection and Accommodation. *Am. J. Path.*, **152**, 829-839.
- 22. Ihrcke, N.S., **Parker, W**., Reissner, K.J. & Platt, J.L. (1998) Regulation of Platelet Heparanase During Inflammation: Role of pH and Proteinases. *J. Cell. Physiol.* **175**, 255-267.
- 23. Yeatman, M., Daggett, C.W., **Parker, W**., Byrne, G.W., Logan, J.S., Frank, M.M., Platt, J.L. & Davis, R.D. (1998) Complement-Mediated Pulmonary Xenograft Injury: Studies in Swine-to-Primate Orthotopic Single Lung Transplant Models. *Transplantation* **65**, 1084-1093.
- 24. Lin, S.S., Parker, W., Everett, M.L. & Platt, J.L. (1998) Differential Recognition of

- α-Galactosyl Residues on Porcine Endothelial Cell Surfaces. Glycobiology 8, 433-443.
- 25. Lin, S.S., Weidner, B.C., Byrne, G.W., Diamond, L.E., Lawson, J.H., Hoopes, C.W., Daniels, L.J., Daggett, C.W., **Parker, W**., Harland, R.C., Davis, R.D., Bollinger, R.R., Logan, J.S. & Platt, J.L. (1998) The Role of Antibodies in Acute Vascular Rejection of Pig-to-Baboon Cardiac Transplants. *J. Clin. Investigation* **101**, 1745-1756.
- 26. Gonzalez-Stawinski, G.V., **Parker, W**., Holzknecht, Z.E., Huber, N.S. & Platt, J.L. (1999) Partial Sequence of Human Platelet Heparitinase and Evidence of its Ability to Polymerize. *Biochim. Biophys. Acta* **1429**, 431-438.
- 27. Yu, P.B., **Parker, W**., Everett, M.L., Fox., I.J. & Platt, J.L. (1999) Immunochemical Properties of Anti-Galα1-3Gal Antibodies After Sensitization with Xenogeneic Tissues. *J. Clin. Immunol.* **19**, 116-126.
- 28. **Parker, W**., Lin, S.S., Yu, P.B., Sood, A., Nakamura, Y.C., Song, A., Everett, M.L. & Platt, J.L. (1999) Naturally Occurring Anti-α-galactosyl Antibodies: Relationship to Xenoreactive Anti-α-galactosyl Antibodies. *Glycobiology* **9**, 865-873.
- 29. Lau, C.L., Daggett, W.C., Yeatman, M.F., Chai, P., Lin, S.S., Lodge, A.J., Chen, E.P., Diamond, L.E., Byrne, G.W., Logan, J.S., **Parker, W.**, Platt, J.L. & Davis, R.D. (2000) The Role of Antibodies in Dysfunction of Pig-to-Baboon Pulmonary Transplants. *J. Thorac. Cardiovasc. Surg.* **120**, 29-38.
- 30. Schoenecker, J.G., Hauck, R.K., Mercer, M.C., **Parker, W**. & Lawson, J.H. (2000) Exposure to Topical Bovine Thrombin During Surgery Elicits a Response Against the Xenogeneic Carbohydrate Galactoseα1-3Galactose. *J. Clin. Immunol.* **20**, 434-444.
- 31. Love, S.D., Lee, W., Nakamura, Y.C., Platt, J.L. Bollinger, R.R. & **Parker**, **W**. (2000) Natural Anti-Carbohydrate Antibodies in Mice: Dependence on Age and Strain. *J. Immunol. Meth.* **246**, 61-68.
- 32. Gonzalez-Stawinski, G.V., Yu, P.B., Love, S.D., **Parker, W**. & Davis, R.D. (2001) Hapten Induced Primary and Memory Humoral Responses are Inhibited by the Infusion of Anti-CD20 Monoclonal Antibody (IDEC-C2B8, Rituximab). *Clinical Immunology* **98**, 175-179.
- 33. Love, S.D., Lee, W., Nakamura, Y.C., Platt, J.L. Bollinger, R.R. & **Parker**, **W**. (2001) Unexpected Anti-αGalNAc Antibodies in α-Galactosyl Transferase Deficient Mice: Complex Relationship Between Genotype and the Natural Antibody Repertoire. *Immunobiology* **203**, 650-658.
- 34. Stezowski, J.J., **Parker, W**., Hilgenkamp, S. & Gdaniec, M. (2001) Pseudo Polymorphism in Tetradeca-2,6-O-methyl-β-cyclodextrin: The Crystal Structures for Two New Hydrates Conformational Variability in the Alkylated β-Cyclodextrin Molecule. *J. Am. Chem. Soc.* **123**, 3919-3926.
- 35. **Parker, W**., Lin, S.S. & Platt, J.L. (2001) Antigen Expression in Xenotransplantation: How Low Must it Go? *Transplantation* 71, 313-319.
- 36. **Parker, W**., Stitzenberg, K.B., Pratt, V.S.W., Nakamura, Y.C., Farrell, L., Ward, C.M., Yu, P.B., Lin, S.S. & Platt, J.L. (2001) Biophysical Characteristics of Anti-Galα1-3Gal IgM Binding to

- Cell Surfaces: Implications for Xenotransplantation. *Transplantation* **71**, 440-446.
- 37. Lin, S.S., Hanaway, M.J., Gonzalez-Stawinski, G.V., Lau, C.L., **Parker, W**., Davis, R.D., Byrne, G.W., Diamond, L.E., Logan, J.S. & Platt, J.L. (2001) Anti-Galα1-3Gal Antibodies in the Acute Vascular Rejection of and Accomodation of Xenografts. *Transplantation* **70**, 1667-1674.
- 38. **Parker, W**., Sood, A. & Song, A. (2001) Organization of Regions with Amphiphilic α-helical potential Within the 3-dimensional Structure of β-sheet Proteins. *Protein Engineering* **14**, 315-319. (Featured on the cover of the journal issue.)
- 39. Schoenecker, J.G., Johnson, R.K., Lesher, A.P., Day, J.D., Love, S.D., Hoffman, M.R., Ortel, T.L., **Parker, W**. & Lawson, J.H. (2001) Exposure of Mice to Bovine Thrombin Induces Systemic Autioimmunity. *Am. J. Path.* **159**, 1957-1969. (Featured on the cover of the journal issue.)
- 40. Gaca, J.G., Lee, W., Aksoy, O., Braedehoeft, S.J., Gonzalez-Stawinski, G.V., **Parker, W**. & Davis, R.D. (2001) Evidence for Polyreactive Xenoreactive Antibodies in the Repertoire of Human Anti-Swine Lung Antibodies. *Transplant Immunol.* **9**, 19-27.
- 41. Gaca, J.G., Lesher, A., Aksoy, O., Gonzalez-Stawinski, G.V, Platt, J.L., Lawson, J.J., **Parker, W**. & Davis, R.D. (2002) Disseminated Intravascular Coagulation in Association with Pig-to-Primate Pulmonary Xenotransplantation. *Transplantation*, **73**, 1717-1723.
- 42. Lee, W., Gaca, J.G., Edwards, L.A., Braedehoeft, S.J., **Parker, W** & Davis, R.D. (2002) Binding of Polyreactive Antibodies to Self Versus Foreign Antigens. *Immunobiology*, **205**, 95-107.
- 43. Gonzalez-Stawinski, G.V., Daggett, C.W., Lau, C.L., Karoor, S., Love, S.D., Logan, J.S., Gaca, J.G., **Parker, W**. & Davis, R.D. (2002) Non-anti-Galα1-3Gal antibody mechanisms are sufficient to cause hyperacute lung dysfunction in pulmonary xenotransplantation. *J. Am. College Surgeons* **194**, 765-773.
- 44. Gaca, J.G., Lesher, A., Aksoy, O., Ruggeri, Z.M., **Parker, W**. & Davis, R.D. (2002) The Role of Porcine von Willebrand Factor Baboon Platelet Interactions in Pulmonary Xenotransplantation. *Transplantation* 74, 1596-1603.
- 45. Everett, M.L., Lin, S.S., Worrell, S.S., Platt, J.L. & **Parker**, W. (2003) The Footprint of Antibody Bound to Pig Cells: Evidence of Complex Surface Topology. *Biochem. Biophys. Res. Comm.* **301**, 751-757.
- 46. Gaca, J.G., Palestrant, D., Lukes, D.J., Olausson, M., **Parker, W**. & Davis, R.D. (2003) Prevention of Acute Lung Injury in Swine: Depletion of Pulmonary Intravascular Macrophages using Liposomal Clodronate. *J. Surg. Res.* **112**, 19-25.
- 47. **Parker**, **W**. (2003) Polyreactive Antibodies and their Association with Xenotransplantation. *Xenotransplantation* **10**, 542-544.

- 48. Lau, C.L., Cantu, E. III, Gonzalez-Stawinski, G.V., Holzknecht, Z.E., Nichols, T.C., Posther, K.E., Rayborn, C.A., Platt, J.L., **Parker, W**. & Davis, R.D. (2003) The Role of Antibodies and Von Willebrand Factor in Discordant Pulmonary Xenotransplantation. *Am. J. Transplantation*. **3**, 1065-1075.
- 49. Schoenecker, J.S., Johnson, R.K., Fields, R.C., Lesher, A.P., Domzalski, T., Baig, K., Lawson, J.H. & Parker, W. (2003) Relative Purity of Thrombin-Based Hemostatic Agents Used in Surgery. *J. Am. College Surgeons.* **197**, 580-590.
- 50. Bollinger, R.R., Everett, M.L., Palestrant, D., Love, S.D., Lin, S.S. & **Parker**, **W**. (2003) Human Secretory IgA May Contribute to Biofilm Formation in the Gut. *Immunology* **109**, 580-587. (The story underlying the discovery is described in detail in Rob Dunn's book, "The Wild Life of our Bodies".)
- 51. Palestrant, D., Holzknecht, Z.E., Collins, B.H., Miller, S.E., **Parker, W**. & Bollinger, R.R. (2004) Microbial Biofilms in the Gut: Visualization by Electron Microscopy and by Acridine Orange Staining. *Ultrastructural Pathology*, **28**, 23-27.
- 52. Everett, M.L., Palestrant, D., Miller, S.E., Bollinger, R.R. & **Parker**, **W**. (2004) Immune Exclusion and Immune Inclusion: a New Model of Host-Bacterial Interactions in the Gut. *Clinical and Applied Immunology Reviews*, **5**, 321-332.
- 53. Orndorff, P.E., Devapali, A., Palestrant, S., Wyse, A., Everett, M.L., Bollinger, R.R. & **Parker**, W. (2004) Immunoglobulin-Mediated Agglutination of and Biofilm Formation by Escherichia coli K-12 require the Type 1 Pilus Fiber. *Infection & Immunity*, **72**, 1929-1938.
- 54. Lawson, J.H., Lynn, K.A., Domzalski, T., Ortel, T.A., Nicklason, L.E. & **Parker**, W. (2005) Anti-Human Factor V Antibodies After Use of Relatively Pure Bovine Thrombin. *Ann. Thoracic Surgery*, 75,1037-1038.
- 55. Bollinger, R.R., Everett, M.L., Wahl, S., Lee, Y.-H., Orndorff, P.E. & **Parker**, **W**. (2005) Secretory IgA and Mucin-Mediated Biofilm Formation by Environmental Strains of *Escherichia coli*: Role of Type 1 pili. *Molecular Immunology*, **43**, 378-387.
- 56. Yu, P.B., **Parker**, **W**., Nayak, J.V. & Platt, J.L. (2005) Sensitization with xenogeneic tissues alters the heavy chain repertoire of human anti-Galα1-3Gal antibodies. *Transplantation*, **80**, 102-109.
- 57. Cantu, E. III, Gaca, J.G., Palestrant, D., Baig, K., Lukes, D.J., Gibson, S.E., Gonzalez-Stawinski, G.V., Olausson, M., **Parker, W**. & Davis, R.D. (2006) Depletion of Porcine Pulmonary Intravascular Macrophages Prevents Hyperacute Pulmonary Xenograft Dysfunction. *Transplantation*, **81**:1157-1164.
- 58. Hartwig, M.G., Appel, J.Z. III, Li, B., Hsieh, C.-C., Lin, S.S., **Parker, W**. & Davis, R.D. (2006) Chronic Aspiration of Gastric Contents Contributes to Accelerated Pulmonary Dysfunction in a Model of Rat Lung Transplantation. *J. Thorac. Cardiovasc. Surg.* **131**, 209-217.
- 59. Gaca, J.G., Appel, J.Z. III, Lukes, D.J., Gonzalez-Stawinski, G.V., Lesher, A., Palestrant, D., Logan, J.S., Love, S.D., Holzknecht, Z.E., Platt, J.L., **Parker, W**. & Davis, R.D. (2006) Effect of an Anti-C5a Monoclonal Antibody Indicates a Prominent Role of Anaphylatoxin in Pulmonary Xenograft Injury. *Transplantation*, **81**:1686-1694.

- 60. Lesher, A., Li, B., Whitt, P., Newton, N., Devalapalli, A.P., Shieh, K., Solow, J.S., & **Parker**, W. (2006) Increased IL-4 Production and Attenuated Proliferative and Proinflammatory Responses of Splenocytes from Wild-Caught Rats (Rattus Norvegicus). *Immunol. and Cell Bio.* **84**:374-382. (Work highlighted in the February, 2009 issue of *Popular Science*.)
- 61. Devalapalli, A.P., Lesher, A., Shieh, K., Solow, J.S., Everett, M.L., Edala, A.S., Whitt, P., Long, R.R., Newton, N. & **Parker, W**. (2006) Increased Levels of IgE and Autoreactive, Polyreactive IgG in Wild Rodents: Implications for the Hygiene Hypothesis. *Scand. J. Immunol.* **64**:125-136.
- 62. Cantu, E. III, Balsara, K.R., Li, B, Lau, C., Gibson, S., Wyse, A., Baig, K, Gaca, J.G., Gonzalez-Stawinski, G.V., Nichols, T., **Parker, W**. & Davis, R.D. (2007) Prolonged Function of Macrophage, von Willebrand Factor Deficient Porcine Pulmonary Xenografts. *Am. J. Transplantation* 7:66-75.
- 63. Bollinger, R.R., Barbas, A.S., Bush, E.L., Lin, S.S. & **Parker. W**. (2007) Biofilms in the large bowel suggest an apparent function of the human vermiform appendix. *J. Theoretical Biology.* **249**: 826-831. (Highlighted by *Discover* magazine in the May, 2010 issue and by Scientific American online in January of 2012.) (The story underlying the discovery is described in detail in Rob Dunn's book, "The Wild Life of our Bodies".)
- 64. Appel, J.Z. III, Lee, S.M., Hartwig, M.G., Li, B., Hsieh, C.-C., Cantu, E. III, Yoon, Y., Lin, S.S., **Parker, W.** & Davis, R.D. (2007) Characterization of the Innate Immune Response to Chronic Aspiration in a Novel Rodent Model. *Respiratory Research* **8**:87.
- 65. Barbas, A.S., Downing, T.E., Balsara, K.R., Tan, H.-E., Rubinstein, G.J., **Parker, W.**, Davis, R.D. & Lin, S.S. (2008) Chronic Aspiration shifts the Immune Response from Th-1 to Th-2 in a Murine Model of Asthma. *European Journal of Clinical Investigation* **38**:596-602.
- 66. Li, B., Hartwig, M.G., Appel, J.Z., Bush, E.L., Balsara, K.R., Holzknecht, Z.E., Collins, B.H., Howell, D.N., **Parker, W.**, Lin, S.S. & Davis, R.D. (2008) Chronic Aspiration of Gastric Fluid Induces Development of Obliterative Bronchiolitis in a Rat Lung Transplant Model. *Am. J. Transplantation* 8:1614-1621.
- 67. Downing, T.E., Sporn, T.A., Bollinger, R.R., Davis, R.D., **Parker, W**. & Lin, S.S. (2008) Pulmonary histopathology in a rat model of chronic aspiration is independent of the acidity of inhaled gastric contents. *Exp. Biol. Med.* **233**:1202-1212.
- 68. Smith, H.F., Fisher, R.E., Thomas, A.D., Everett, M.L., Bollinger R.R., & **Parker**, W. (2009) Comparative Anatomy and Phylogenetic Distribution of the Mammalian Cecal Appendix. *Journal of Evolutionary Biology*. **22**:1984-1999. (Highlighted by *Science* magazine in the October 23rd, 2009 issue)
- 69. Barbas, A.S., Lesher, A., Thomas, A.D., Wyse, A., Devalapalli, A.P., Lee, Y.-H., Tan, H.-E., Orndorff, P.E., Bollinger, R.R. & **Parker, W**. (2009) Altering and Assessing Persistence of Genetically Modified E. coli MG1655 in the Large Bowel. *Experimental Biology and Medicine*. **234**:1174–1185.
- 70. Cheng, C.M., Hsieh, C.C., Lin, C.S., Dai, Z.-K., Shih, P.K., Everett, M.L., **Parker, W.**, Davis, R.D. & Lin, S.S. (2010) Macrophage activation by gastric fluid suggests MMP involvement in aspiration-induced lung disease. *Immunobiology*. **215**:173-81 doi:10.1016/j.imbio.2009.02.001.

- 71. Thomas, A.D., Su, K.-Y., Changa, J.-C., Leung, J. H., Lee, S.M., Holzknecht, Z.E., Everett, M.L., **Parker, W**., Davis, R.D., and Lin, S.S. (2010) Gastroesophageal Reflux-Associated Aspiration Alters the Immune Response in Asthma. *Surgical Endoscopy* **24**:1066–1074.
- 72. Lee, S.M. Wyse, A., Lesher, A., Everett, M.L., Lou, L., Holzknecht, Z.E., Whitesides, J.F., Spears, P.A., Bowles, D.E., Lin, S.S., Tonkonogy, S.L., Orndorff, P.E. Bollinger, R.R.& **Parker, W**. (2010) Adaptation in a mouse colony monoassociated with *Escherichia coli* K-12 for more than 1000 days. *Applied and Environmental Microbiology* **74**:4655-4663.
- 73. Thomas, A.D., & **Parker**, **W**. (2010) Cultivation of Epithelial-Associated Microbiota by the Immune System. *Future Microbiology*. **5**, 1483-1492.
- 74. Chen, E., Everett, M.L, Holzknecht, Z.E., Holzknecht, R.A., Lin, S.S., Bowles, D.E., and **Parker, W** (2010). Short-Lived α-helical Intermediates in the Folding of β-sheet Proteins. *Biochemistry* **49**:5609-5619.
- 75. Bush, E.L., Barbas, A.S., **Parker, W**., Davis, R.D. & Lin, S.S. (2011) Coagulopathy in α-galactosyl transferase knockout pulmonary xenotransplants. *Xenotransplantation* **18**:6-13.
- 76. Laurin, M., Everett, M.L. & **Parker**, **W.** (2011) The cecal appendix: a useful structure with a reputation tarnished by hygiene. *The Anatomical Record* **294**:567–579.
- 77. Lee, Y.-H., Su, K.-Y., Wyse, A., Barbas, A.S., Palestrant, D., Shieh, K., Everett, M.L., Devalapalli, A., Orndorff, P.E., Bollinger, R.R. & **Parker, W.** (2011) Incorporation of Secretory IgA into Biofilms Can Decrease their Resistance to Ciprofloxacin. *Microbiology and Immunology*, **55**:174-183.
- 78. Kotzé, S.E., Holzknecht, Z.E., Thomas, A.D., Everett, M.L., Taylor, S., Duckett, L.D., Whitesides, J., McDermott, P., Lin, S.S. & **Parker, W**. (2011) Spontaneous bacterial cell lysis and biofilm formation in the colon of the Cape Dune mole-rat and the laboratory rabbit. *Applied Microbiology and Biotechnology*, **90**:1773-1783.
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