

Publications: (student authors [*: undergraduate; #: graduate] mentored by E. Martin/Porter underlined)

Research Papers-Peer Reviewed

1. Bhakdi, S. and **Martin, E.** (1991) Superoxide generation by human neutrophils induced by low doses of *Escherichia coli* hemolysin. *Infect. Immun.* **59**, 2955-62.
2. **Martin, E.** and Bhakdi, S. (1991) Quantitative analysis of opsonophagocytosis and of killing of *Candida albicans* by human peripheral blood leukocytes by using flow cytometry. *J. Clin. Microbiol.* **29**, 2013-23.
3. **Martin, E.** and Bhakdi, S. (1992) Flow cytometric assay for quantifying opsonophagocytosis and killing of *Staphylococcus aureus* by peripheral blood leukocytes. *J. Clin. Microbiol.* **30**, 2246-55.
4. **Martin, E., Schlasius, U***. and Bhakdi, S. (1992) Flow cytometric assay for estimating fungicidal activity of amphotericin B in human serum. *Med. Microbiol. Immunol.* **181**, 117-26.
5. Walev, I., **Martin, E.**, Jonas, D., Mohamadzadeh, M., Mueller-Klieser, W., Kunz, L. and Bhakdi, S. (1993) Staphylococcal alpha-toxin kills human keratinocytes by permeabilizing the plasma membrane for monovalent ions. *Infect. Immun.* **61**, 4972-9.
6. **Martin, E.**, Stueben, A., Goerz, A*., Weller, U. and Bhakdi, S. (1994) Novel aspect of amphotericin B action: accumulation in human monocytes potentiates killing of phagocytosed *Candida albicans*. *Antimicrob. Agents Chemother.* **38**, 13-22.
7. **Martin, E., Maier, F***. and Bhakdi, S. (1994) Antagonistic effects of fluconazole and 5-fluorocytosine on the candidacidal action of amphotericin B in human serum. *Antimicrob. Agents Chemother.* **38**, 1331-8.
8. Vogel, L., van Alphen, L., Geluk, F., Troelstra, A., **Martin, E.**, Bredius, R., Eijk, P., Jansen, H. and Dankert, J. (1994) Quantitative flow cytometric analysis of opsonophagocytosis and killing of nonencapsulated *Haemophilus influenzae* by human polymorphonuclear leukocytes. *Clin. Diagn. Lab. Immunol.* **1**, 394-400.
9. Walev, I., Palmer, M., **Martin, E.**, Jonas, D., Weller, U., Hohn-Bentz, H., Husmann, M. and Bhakdi S. (1994) Recovery of human fibroblasts from attack by the pore forming alpha-toxin of *Staphylococcus aureus*. *Microbial Pathogen.* **17**, 187-201.
10. Jahn, B., **Martin E.**, Stueben, A. and Bhakdi, S. (1995) Susceptibility Testing of *Candida albicans* and *Aspergillus species* by a simple microtiter menadione- augmented 3-(4,5-dimethyl-2-thiazolyl)-2,5-diphenyl-2H-tetrazolium bromide assay. *J. Clin. Microbiol.* **33**, 661-7.
11. Valore, E., **Martin, E.**, Harwig, S.L. and Ganz, T. (1996) Intramolecular inhibition of human defensin HNP-1 by its propiece. *J. Clin. Invest.* **97**, 1624-9.
12. **Porter (Martin), E.**, Liu, L., Oren, A., Anton, P. and Ganz, T. (1997) Localization of human intestinal defensin HD-5 in Paneth cell granules. *Infect. Immun.* **65**, 2389-95.
13. **Porter (Martin), E.**, VanDam, E., Valore, E.V. and Ganz, T. (1997) Broad-spectrum antimicrobial activity of human intestinal defensin HD-5. *Infect. Immun.* **65**, 2396-401.
14. Quayle, A.J., **Porter (Martin), E.**, Nussbaum, A.A., Wang, Y.M., Brabec, C., Yip, K.-P. and Ganz, T. (1998) Gene expression, immunolocalization, and secretion of human defensin-5 in human female reproductive tract. *Am. J. Pathol.* **152**, 1247-58.
15. Salzman, N.H., Polin, A.P., Harris, M.C., Ruchelli, E., Hebra, A., Zirin-Butler, S., Jawad, A., **Porter (Martin) E.** and Bevins, C.L. (1998) Enteric defensin expression in necrotizing enterocolitis. *Pediatr. Res.* **44**, 20-6.
16. **Porter (Martin), E.**, Poles, M. A., Lee, J.S., Naitoh, J., Bevins, C.L. and Ganz, T. (1998) Isolation of human intestinal defensins from ileal neobladder urine. *FEBS Letters* **434**, 272-6.
17. O'Neil, D. A., **Porter (Martin), E.**, Elewaut, D., Anderson, G. M., Eckman, L., Ganz, T. and Kagnoff, M.F. (1999) Expression and regulation of the human β-defensins hBD-1 and hBD-2 in intestinal epithelium. *J. Immunol.* **163**, 6718-24.

18. O'Neil, D. A., Cole, S. P., **Martin-Porter, E.**, Housley, M. P., Liu, L., Ganz, T. and Kagnoff, M.F. (2000) Regulation of Human β -Defensins by Gastric Epithelial Cells in Response to Infection with *Helicobacter pylori* or Stimulation with Interleukin-1. *Infect. Immun.* **68**, 5412-15.
19. Inada, K., Tanaka, H., Nakanishi, H., Tsukamoto, T., Ikehara, Y., Tatematsu, K., Nakamura, S., **Porter, E.M.**, and Tatematsu, M. (2001) Identification of Paneth cells in pyloric glands associated with gastric and intestinal mixed-type intestinal metaplasia of the human stomach. *Virchows Arch.* **439**, 14-20.
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24. Shen, B., **Porter, M. E.**, Reynoso, E*, Shen, C., Ghosh, D., Connor, J. T., Drazba, J., Rho, H. K., Gramlich, T. L., Li, R., Ormsby, A. H., Sy, M.-S., Ganz, T., and Bevins C. L. (2005) Human Defensin-5 Expression in Intestinal Metaplasia of the Upper Gastrointestinal Tract. *J. Clin. Pathol.* **58**, 687-94.
25. **Porter, E.**, Yang, H., Yavagal, S., Preza, G#, C., Murillo, O*, Lima, H.*, Greene, S., Mahoozi, L., Klein-Patel, M., Diamond, G., Gulati, S., Ganz, T., Rice, P. A., and Quayle, A. J. (2005). Distinct Defensin Profiles in *Neisseria gonorrhoeae* and *Chlamydia trachomatis* Urethritis Reveal Novel Epithelial Cell-Neutrophil Interactions. *Infect. Immun.* **73**, 4823-33.
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28. Klotman, M.E., Rapista, A., Teleshova, A., Benito, B., Micsenyi, A., Jarvis, G.A., Lu, W., **Porter, E.**, and Chang, T.L. (2008) *Neisseria gonorrhoeae*-induced human defensins 5 and 6 increase HIV infectivity: role in enhanced transmission. *J. Immunol.* **180**, 6176-85.
29. Do T.Q., Moshkani, S#, Castillo, P#, Anunta#, S., Pogosyan*, A., Cheung, A#, Marbois, B., Faull, K.F., Ernst, W., Chiang, S.M., Fujii, G., Clarke, C.F., Foster, K., and **Porter, E.** (2008) Lipids Including Cholesteryl Linoleate and Cholesteryl Arachidonate Contribute to the Inherent Antibacterial Activity of Human Nasal Fluid. *J Immunol.* **181**, 4177-87.
30. Aisling, S.D., Maginnis, M.S., Jordan, J.A., Gasparovic, M.L., Manley, K., Page, R., Williams, G., **Porter, E.**, O'Hara, B.A., and Atwood, W.J. (2008) Human alpha-defensins inhibit BK virus infection by aggregating virions and blocking binding to host cells. *J. Biol. Chem.* **283**, 31125-32. Epub 2008 Sep 9.
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32. Nuding, S., Zabel, L.T., Enders, C., **Porter, E.**, Fellermann, K., Wehkamp, J., Mueller, H.A.G., and Stange, E.F. (2009) Antibacterial activity of human defensins on anaerobic intestinal bacterial species: a major role of HBD-3. *Microbes Infect.* **11**, 384-93.

33. Lee, J.T., Jansen, M.#, Yilma, A.N#, Nguyen, A.*, Desharnais, R., and **Porter, E.** (2010) Antimicrobial Lipids: Novel Innate Defense Molecules are Elevated in Sinus Secretions of Patients with Chronic Rhinosinusitis. *Am J Rhinol Allergy.* **24**, -104. PubMed PMID: 20338107
34. Jansen, M.A#., Kiwata, J#., Arceo, J., Faull, K.F., Hanrahan, G., and **Porter, E.** (2010) Evolving Neural Network Optimization of Cholestryl Ester Separation by Reversed-Phase HPLC. *Anal. Bioanal. Chem.* **397**(6):2367-74. (open access)
35. Brodrick, B., Vidrich, A., **Porter, E.**, Bradley, L., Buzan, J.M., and Cohn, S.M. (2011) Fibroblastgrowth factor receptor-3 regulates expression of paneth cell lineage specific genes in intestinal epithelial cells through both TCF4/{beta}-catenin-dependent and -independent signaling pathways. *J Biol Chem.* **286**, 18515-25. PubMed PMID: 21388956.
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37. Spencer, J.D., Hains, D.S., Porter, E., Bevins C.L., Dirosario J., Becknell B., Wang H., and Schwaderer A.L.(2012) Human alpha defensin 5 expression in the human kidney and urinary tract. *PLoS One.* **7**(2):e31712. doi: 10.1371/journal.pone.0031712. Epub 2012. Feb 16. PubMed PMID: 22359618; PubMed Central PMCID: PMC3281003
38. Kiwata J#, Anouseyan, R*., Desharnais, R., Cornwell, A., Nazareth, K. and **Porter, E.** (2014) Effects of Aerobic Exercise on Lipid-Effector Molecules of the Innate Immune Response. *Med. Sci. Sports Exerc.* **46**, 506-12. doi: 10.1249/MSS.0000000000000137. PMID: 24145722. NIHMS542373
39. Lee, J.T., Escobar, O.H*, Anouseyan, R., Janisiewicz, A. Eivers, E., Blackwell, K.E., Keschner, D.B., Garg, R., and **Porter, E.** (2014) Assessment of epithelial innate antimicrobial factors in sinus tissue from patients with and without chronic rhinosinusitis. *Int. Forum Allergy Rhinol.* Sep 7. doi: 10.1002/alr.21404. [Epub ahead of print].

Reviews-Peer reviewed

1. Bhakdi, S., Weller, U., Walev, I., **Martin, E.**, Jonas, D. and Palmer, M. (1993) A guide to the use of pore-forming toxins for controlled permeabilization of cell membranes. *Med. Microbiol. Immunol.* **182**, 167-75.
2. **Martin, E.** and Bhakdi, S. (1993) Some new developements in clinical mycology: applications of flow cytometry. *Bone marrow Transplantation.* **12**, S144-5.
3. **Martin, E.**, Ganz, T. and Lehrer, R.I. (1995) Defensins and other endogenous peptide antibiotics of vertebrates. *J. Leuk. Biol.* **58**, 128-36.
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5. **Porter (Martin), E.**, Bevins, C.L., Gosh, D., and Ganz, T. (2002) The multifaceted Paneth Cell. *Cell Mol. Life Sci.* **59**, 156 –70.

Review-Invited

1. Bartlett, J., Gakhar, L., Penterman J., Singh, P., Mallampalli, R.K., **Porter, E.**, and McCray, P.B. (2011). PLUNC: a multifunctional surfactant of the airways. *Biochem. Soc. Trans.* **39**, 1012-6.
2. **Porter, E.**, Valore, E.V., Anouseyan, R., and Salzman, N.H. (2015). Detection of Antimicrobial (Poly)Peptides with Acid Urea Polyacrylamide Gel Electrophoresis followed by Western Immunoblot. In: Methods in Molecular Biology, vol. 1225: *Salmonella Protocols* second edition: Edited by H. Schatten and A. Eisenstark, Humana Press Inc, Totowa, NJ.