

## V. PUBLICATIONS

**Ph.D Thesis:** Parasympathetic Control of Intestinal Function (1983).

### **Manuscripts: peer reviewed**

#### **1982**

1. Cammack, J., Read, N.W., Cann, P., **Greenwood, B.** and Holgate, A.M. (1982). The effect of prolonged exercise on the passage of a solid meal through the stomach and small intestine. *Gut* 23: 957-961.

#### **1983**

2. Davison, J.S., **Greenwood, B.**, Najafi-Farasah, A. and Read, N.W. (1983). The effect of atropine and secoverine on gastric secretion and motility in the mouse isolated stomach. *Br. J. Pharm.* 79: 525-529.

#### **1984**

3. **Greenwood, B.**, Read, N.W., Hardcastle, J. and Hardcastle, P.T. (1984). Effect of secoverine and atropine on intestinal secretion and motor activity in the rat small intestine *in vivo*. *J. Pharm. Pharmacol.* 36(2): 100-106

#### **1985**

4. **Greenwood, B.** and Davison, J.S. (1985). The role of extrinsic and intrinsic nerves in the relationship between intestinal motility and transmural potential difference in the anesthetized ferret. *Gastroenterology* 89: 1286-1292.
5. **Greenwood, B.** and Read, N.W. (1985). Vagal control of fluid transport, transmural PD and motility in the ferret jejunum. *Am. J. Physiol.* 249: G651-G654.
6. **Greenwood, B.** and Davison, J.S. (1985). Atropine exhibits a selectivity of action in the small intestine. *TIPS* 63(4): 154-155.

#### **1986**

8. **Greenwood, B.** and Read, N.W. (1986). The relationship between motor activity and transmural potential difference in the jejunum of the anaesthetized ferret. *Can. J. Physiol. Pharmacol.* 64(2): 180-187.
9. **Greenwood, B.**, Diamant, S. and Davison, J.S. (1986). The relationship between intestinal motility and transmural potential difference in the guinea pig intestine *in vitro*: Is there a neural link? *Can. J. Physiol. Pharmacol.* 64: 993-998.

#### **1987**

10. **Greenwood, B.** and Davison, J.S. (1987). Investigation of the vagally induced changes in transmural potential difference in the ferret jejunum *in vivo*. *J. Auto. Nervous Sys.* 19: 113-118.
11. **Greenwood, B.**, Tremblay, L. and Davison, J.S. (1987). Sympathetic control of motility, fluid transport and transmural PD in the rabbit ileum. *Am. J. Physiol.* 16: G726-G729.
12. **Greenwood, B.** and J.S. Davison (1987). The relationship between gastrointestinal mechanical activity and transport. Peer-reviewed EDITORIAL REVIEW. *Am. J. Physiol.* 252: G1-G7.

#### **1988**

13. **Greenwood, B.** and Fitzackerley, J. (1988). Desheathing the nodose ganglion is not a reliable method of de-efferentation in the ferret. *Life Sciences* 43(17): 1393-1401.
14. **Greenwood, B.**, Huizinga, J.D., Chow, E. and Dodds, W.J. (1988). Relationship between transmural potential difference, smooth muscle electrical activity and contractility in the rabbit ileum *in vitro*. *Can. J. Physiol. Pharmacol.* 66: 1161-1165.

#### **1989**

15. Blank, E.H., **Greenwood, B.** and Dodds, W.J. (1989). Cholinergic control of smooth muscle peristalsis in the cat esophagus: A pharmacological investigation. *Am. J. Physiol.* 257: G517-G523.

#### **1990**

16. **Greenwood, B.**, Doolittle, T., Davison, J.S., Koch, T., See, N. and Dodds, W.J. (1990). The effects of substance P and VIP on jejunal motility and epithelial transport in the anesthetized ferret. *Gastroenterology* 98: 1509-1517.

17. **Greenwood, B.**, Davison, J.S. and Dodds, W.J. (1990). Influence of selective alpha and beta adrenoceptor antagonists on the control of motor activity and transmural potential differences in the rabbit ileum *in vitro*. *Neurogastroenterol Motil.* 2(1): 47-52.
18. **Greenwood, B.**, Wood, J. and Kostreva, D. (1990). Medullary projections of abdominal vagal afferents in the ferret using [<sup>14</sup>C]2-deoxyglucose. *Brain Research* 520: 192-198.
19. See, A.N., **Greenwood, B.** and Bass, P. (1990). The submucosal plexus alone integrates motor activity and epithelial transport in the rat jejunum. *Am. J. Physiol.* 259: G593-G598.

#### 1992

20. **Greenwood, B.** and Mandel, K.G. (1992). Effect of mebeverine hydrochloride on jejunal motility and epithelial transport in the anesthetized ferret. *Eur. J. Pharmacol.* 211: 143-147.
21. Kirst H.A., **Greenwood B.** and Gidda J.S. (1992). LY267108- A Gastrointestinal Prokinetic Agent. *Drugs for the Future* 17(1): 18-20.
22. **Greenwood, B.**, Blank, E and Dodds, W.J. (1992). Nicotine stimulates esophageal peristaltic contractions in cats by a central mechanism. *Am. J. Physiol.* 262:G567-571.
23. Frantizides, C.T., Lianos, E.A., Wittman, D., **Greenwood, B.** and Edmiston, C.E. (1992) Prostaglandins and modulation of small bowel myoelectric activity. *Am. J. Physiol* 262: 488-497.
24. **Greenwood, B.**, Mantle, M., Thackore, E. (1992). An investigation of the cholinergic control of mucus secretion in the small intestine of the rabbit. *Gastroenterology* 103: 496-505.

#### 1993

25. Palmer, J. and **Greenwood, B.** (1993). Regional content of enteric substance P and vasoactive intestinal peptide during intestinal inflammation in the parasitized ferret. *Neuropeptides* 25: 95-103.

#### 1994

26. **Greenwood, B.**, Dieckman, D., Kirst, H. and Gidda, J. (1994). Effect of LY267108 on Lower Esophageal Spincter Pressure and Esophageal Function in the cat. *Gastroenterology* 106: 624-628
27. Mitan, S., Howbert, J.J. and **Greenwood, B.** (1994). CCK-8 contracts the gallbladder and colon through different mechanisms in the ferret. *Annals of the New York Acad. Sci.* 713: 401-403.
28. Shannon, H., Bymaster, F.P., Calligaro, D., **Greenwood, B.**, et al. (1994). Xanomeline: a potent and functionally selective M1 muscarinic receptor agonist. *J. Pharm. Exp Ther.* 269: 271-281.
30. **Greenwood, B.** (1994). Muscarinic receptor regulation of the esophagus and lower esophageal sphincter. *Dysphagia* 309(9): 4.

#### 1995

31. **Greenwood, B.** and DiMicco J.A. (1995). Activation of the hypothalamic dorsomedial nucleus stimulates intestinal motility in rats. *Am. J. Physiol.* 268: G514-G521.

#### 1996

32. **Greenwood, B.** and Palmer, J.M. (1996). Neural Integration of jejunal motility and ion transport in nemotode infected ferrets. *Am. J. Physiol.* 271: G48-G55.
33. **Greenwood, B.**, Rodriguez, S., Dector, D., Maton, P., and Robinson, M. (1996). Irritable Bowel Syndrome: A study to investigate the mechanisms of visceral hypersensitivity. *J. OK. State Med. Association* 89(2): 1-4.

#### 1997

34. Mitch, C.H., Brown, T., Bymaster, F.P., Calligaro, D.O., Dieckman-McGinty, D.K., Merrit, L., Quinby, S., Sawyer, B., Shannon, H., Shipley, L., Ward, J., Hansen, K., Olesen, P., Sauerberg, P., Sheardown, M., Swedberg, M., Suzdak, P. and **Greenwood, B.** (1997). Novel muscarinic agents with potent and selective effects on the gastrointestinal tract: potential application for the treatment of irritable bowel syndrome. *J. Med. Chem.* 40(4): 538-546
35. Robinson, M, Maton, P., Rodriguez, S., **Greenwood, B.** and Humphries, T.J. (1997). Effects of oral rabeprazole on esophageal and gastric pH in patients with gastroesophageal reflux disease. *J. Alimentary Pharmacol.* 11: 973-980.

## 1998

36. Rodriguez, S., Miner, P., **Greenwood-Van Meerveld, B.**, Maton, P.N., Pappa, K. and Robinson, M. (1998). Comparison of three meals and their effectiveness in provoking heartburn. *Dig. Dis. and Sci* 43(3): 458-490.
37. McRorie, **Greenwood, B.** and Rudolph, C. (1998). Propagating contractions in the mini-pig colon: a proposed mechanism for rapid gas propulsion. *Dig. Dis. and Sci.* 43(5) 957-963.
38. **Greenwood-Van Meerveld, B.** and Barron, K.W. (1998). Tonic GABA-A receptor mediated neurotransmission in the dorsal vagal complex regulates intestinal motility in rats. *Eur. J. Pharmacol* 346: 197-202.
39. Robinson, M., Earnest, D., Rodriguez-Stanley, S., **Greenwood-Van Meerveld, B.**, Jaffe, P., Silver, M.T., Kleoudis, C.S., Wilson, L.E. and Murdock, R.H. (1998). Heartburn requiring frequent antacid use may indicate significant illness. *Arch of Internal Medicine* 158: 2373-2376.

## 1999

40. **Greenwood-Van Meerveld, B.**, Tyler, K., Kuge, T. and Ogata, N. (1999). Antidiarrheal effects of seirogan on jejunal and colonic motility in vitro. *Alimentary Pharmacol. Ther.* 13(1): 97-102.
41. Rodriguez-Stanley, S., Robinson, M., Earnest, D., **Greenwood-Van Meerveld, B.** and Miner, P.B. (1999). Esophageal hypersensitivity may be a major cause of heartburn. *Am. Journal Gastroenterology* 94(3): 628-631.
42. Venkova, K., Palmer, J.M. and **Greenwood-Van Meerveld, B.** (1999). Nematode-induced jejunal inflammation in the ferret causes long-term changes in excitatory neuromuscular responses. *J. Pharmacol. and Exper. Therap.* 290(1): 96-103.
43. **Greenwood-Van Meerveld, B.**, Neeley, D., Tyler, K. and McRorie (1999). Comparison of effects on colonic motility and stool characteristics caused by feeding olestra and wheat bran to ambulatory mini-pigs. *Dig. Dis. Sci.* 44(7): 1282-1287.

## 2000

44. Gunter, W., Shepard, J., Foreman, R., Myers, D. and **Greenwood-Van Meerveld, B.** (2000). Evidence for visceral hypersensitivity in high anxiety rats. *Physiology and Behav.* 69(3):379-382.
45. Venkova, K., Dunn, T., Adesina, A.M. and **Greenwood-Van Meerveld, B.** (2000). Neuromuscular dysfunction in the jejunum and colon of HLA-B27 transgenic rats. *J. Pharmacol. Exp. Ther.* 293: 60-66.
46. **Greenwood-Van Meerveld, B.**, Tyler, K.R., Venkova, K. and Kuge, T. (2000). Comparison of the Antidiarrheal effects of Wood Creosote and Loperamide in the Rat Jejunum and Colon *In Vitro*. *Biol. Pharm. Bull.* 23(8): 952-956.
47. Tyler, K., Hillard, C. and **Greenwood-Van Meerveld, B.** (2000). Inhibition of small intestinal secretion by cannabinoids is CB<sub>1</sub> receptor-mediated in rats. *Eur. J. Pharm.* 409(2): 207-211.
48. **Greenwood-Van Meerveld, B.**, Tyler, K. and Keith, J.C. (2000). Recombinant human interleukin-11 modulates ion transport and mucosal inflammation in the small intestine and colon. *Laboratory Investigation* 90:1269-1280.

## 2001

49. **Greenwood-Van Meerveld, B.**, Gibson, M., Gunter, W., Shepard, J., Foreman, R. and Myers, D. (2001). Stereotaxic delivery of corticosterone to the amygdala modulates colonic sensitivity in rats. *Brain Research* 893: 135-142.
50. Palmer, J.M. and **Greenwood-Van Meerveld, B.** (2001). Integrative neuroimmunomodulation of gastrointestinal function during enteric parasitism (invited review). *J. Parasitology* 87(3): 483-504
51. Doherty, P.C., Bivalacqua, T.J., Champion, H.C., Kadowitz, P.J., **Greenwood-Van Meerveld, B.**, Berzetei-Gurske, I. and Hellstrom, W.J.G. (2001). The influence of selective type 5 phosphodiesterase inhibitors on erectile response in the cat. *J. Urology* 165: 1004-1009.
52. Kuge, T., Venkova, K. and **Greenwood-Van Meerveld, B.** (2001). Effects of wood creosote on enterotoxin-induced secretion in the rat jejunum and colon in vitro. *Biol. Pharm. Bull.* 24(6): 623-627.

53. **Greenwood-Van Meerveld, B.**, Venkova, K. and Keith, J. (2001). Recombinant Human Interleukin 11 (rhIL-11) restores smooth muscle function in the jejunum and colon of HLA-B27 rats. *J Pharmacol Exp Ther.* 299(1): 58-66.

#### 2002

54. Venkova, D., Sutkowski-Markmann and **Greenwood-Van Meerveld, B.** (2002). Activity of a new NK<sub>1</sub> receptor antagonist in the gastrointestinal tract. *J. Pharmacology and Experimental Therapeutics* 300: 1-7.
55. Kuge, T., Venkova, K. and **Greenwood-Van Meerveld, B.** (2002). Effects of Seirogan on propulsive colonic motility and stool characteristics in ambulatory mini-pigs. *Digestive Diseases and Sciences* 47(12): 2651-2656.

#### 2003

56. **Greenwood-Van Meerveld, B.**, Venkova, K. and Connolly, K. (2003). Efficacy of Repifermin (KGF-2) against abnormalities in ion transport associated with tissue injury in a murine model of colitis. *J. Pharmacy and Pharmacology* 55: 67-75.
57. Qui, C., **Greenwood-Van Meerveld, B.**, Myers, D. and Foreman, R.D. (2003). Corticosterone acts directly at the amygdala to alter spinal neuronal activity in response to colorectal distention. *J. Neuroscience* 89: 1343-1352.
58. **Greenwood-Van Meerveld, B.**, Johnson, A., Foreman, R. and Linderoth, B. (2003). Spinal Cord Stimulation Attenuates Colonic Hypersensitivity in a Rat Model. *Autonomic Neurosci.* 104(1): 17-24.
59. **Greenwood-Van Meerveld, B.**, Gibson, M., Johnson, A., Venkova, K. and Sutkowski-Markmann, D. (2003). NK<sub>1</sub> receptor mediated mechanisms modulate visceral hypersensitivity in guinea-pigs. *Pharmacology, Biochemistry and Behavior* 74: 1005-1013.
60. Ataka, K., Kuge, T., Venkova, K. and **Greenwood-Van Meerveld, B.** (2003). Effect of Seirogan® (Wood Creosote) on Stress-induced Ion Secretion in Rat Intestinal Epithelium. *Digestive Diseases and Sciences* 48(7): 1303-1309.
61. Qin, C., **Greenwood-Van Meerveld, B.** and Foreman, R.D. (2003). Visceromotor and spinal neuronal responses to colorectal distension in rats with stereotaxic application of aldosterone onto the amygdala. *J. Neurophysiol.* 90: 2-11.
62. Qin, C., **Greenwood-Van Meerveld, B.** and Foreman, R.D. (2003). Spinal neuronal responses to urinary bladder distension in rats with corticosterone or aldosterone onto the amygdala. *J. Neurophysiol.* 90: 2180-2189.

#### 2004

63. Venkova, K., Tyler, K., Keith, J. and **Greenwood-Van Meerveld, B.** (2004). Recombinant Human Interleukin-11 (rhIL-11) normalizes epithelial transport in the colon of HLA-B27 rats. *J. Pharmacology and Experimental Therapeutics* 308: 206-213.
64. Venkova, K. and **Greenwood-Van Meerveld, B.** (2004). Effect of TAK-637 on enteric NK1 receptor mediated mechanisms regulating colonic secretion. *Toxicology Appl. Pharm.* 196: 215-222.
65. **Greenwood-Van Meerveld, B.**, Gardner, C.J., Little, P.J., Hicks, G.A. and Dehaven-Hudkins, D.L. (2004) Preclinical studies of opioids and opioid antagonists on gastrointestinal function. *Neurogastroenterol Motil:* 16(0): 46-53.

#### 2005

66. **Greenwood-Van Meerveld, B.**, Johnson, A.C., Cochrane, S., Schulkin, J. and Myers, D.A. (2005). CRF-1 Receptor mediated mechanisms inhibit colonic hypersensitivity in rats. *Neurogastroenterol. Motil.* 17(3): 415-422.
67. Myers, D.A., Gibson, M., Schulkin, J. and **Greenwood-Van Meerveld, B.** (2005). Corticosterone implants to the amygdala and Type 1 CRH receptor regulation: Effects on behavior and colonic sensitivity. *Behavioral Brain Research* 161: 39-44.
68. **Greenwood-Van Meerveld, B.**, Johnson, A., Foreman, R.D. and Linderoth, B. (2005). Spinal cord stimulation attenuates pathological visceromotor reflexes in a rat model of post-inflammatory colonic hypersensitivity. *Autonomic Neuroscience* 122: 69-76.

## 2006

69. **Greenwood-Van Meerveld, B.**, Venkova, K., Hicks, G., Dennis, E. and Crowell, M.D. (2006). Activation of peripheral 5HT<sub>4</sub> receptors attenuates colonic sensitivity to intraluminal distension. *Neurogastroenterol. Motil.* 18(1): 76-86.
70. Venkova, K. and **Greenwood-Van Meerveld, B.** (2006). Long-lasting changes in small intestinal transport following the recovery from *Trichinella spiralis* infection. *Neurogastroenterol. Motil.* 18(3): 234-242.
71. **Greenwood-Van Meerveld, B.**, Johnson, A., Schulkin, J. and Myers, D.A. (2006). Long term expression of CRF in the paraventricular nucleus of the hypothalamus in response to an acute colonic inflammation. *Brain Research* 161: 39-44.
72. **Greenwood-Van Meerveld, B.**, Campbell-Dittmeyer, K., Johnson, A.C. and Hicks, G.A. (2006). 5-HT<sub>2B</sub> receptors do not modulate sensitivity to colonic distension in rats with acute colorectal hypersensitivity. *Neurogastroenterol. Motil.* 18(5): 343-345.
73. Coates, M.D., Johnson, A.C., **Greenwood-Van Meerveld, B.** and Mawe, G.M. (2006). Effects of serotonin transporter inhibition on gastrointestinal motility and colonic sensitivity in the mouse. *Neurogastroenterol. Motil* 18(6): 464-471.
74. Kuge, T., **Greenwood-Van Meerveld, B.** and Sokabe, M. (2006). Stress-induced breakdown of intestinal barrier function in the rat: reversal by wood creosote. *Life Sci.* 79: 913-918.
75. Malykhina, A.P., Qin, C., **Greenwood-Van Meerveld, B.**, Foreman, R.D., Lupu, F. and Akbarali, H.I. (2006). Hyperexcitability of convergent colon and bladder dorsal root ganglion neurons after colonic inflammation: mechanism for pelvic organ cross-talk. *Neurogastroenterol. Motil* 18(10): 936-948.
76. **Greenwood-Van Meerveld, B.** and Tyler, K. (2006). CPI-1189 protects against DSS-induced colitis in a rodent model. *Am. J. Pharm. Tox.* 1(3): 54-59.

## 2007

77. **Greenwood-Van Meerveld, B.** and Tyler, K. (2007). CPI-1189 protects against TNBS-induced colitis in a rodent model. *Am. J. Pharm. Tox.* 2(2): 30-38.
78. Myers, B. and **Greenwood-Van Meerveld, B.** (2007). Glucocorticoid and mineralocorticoid receptors in the amygdala regulate anxiety and colonic hypersensitivity. *Am. J. Physiol.* 292: G1622-G1629.
79. Trimble, N., Johnson, A.C., Foster, A. and **Greenwood-Van Meerveld, B.** (2007). Corticotrophin-releasing factor receptor 1-deficient mice show decreased anxiety and colonic sensitivity. *Neurogastroenterol. Motil.* 19(9): 754-760.
80. Myers, B., Dittmeyer, K. and **Greenwood-Van Meerveld, B.** (2007). Involvement of amygdaloid corticosterone in altered visceral and somatic sensation. *Behavioral Brain Res.* 181(1): 163-167.
81. Tyler, K., Moriceau, S., Sullivan, R.M. and **Greenwood-Van Meerveld, B.** (2007). Long-term colonic hypersensitivity in adult rats induced by neonatal unpredictable vs. predictable shock. *Neurogastroenterol. Motil.* 19(9): 761-768.
82. Venkova, K., Fraser, G. and **Greenwood-Van Meerveld, B.** (2007). Prokinetic effects of a new ghrelin agonist for the treatment of post-operative ileus. *Dig. Dis. and Sci.* 52(9): 224-228.
83. **Greenwood-Van Meerveld, B.** (2007). Importance of 5-hydroxytryptamine receptors on intestinal afferents in the regulation of visceral sensitivity. *Neurogastroenterol. Motil.* 19(0): 13-18.
84. **Greenwood-Van Meerveld, B.** (2007). Emerging drugs for post-operative ileus. *Expert Opin. Emerging Drugs* 12(4): 619-626.
85. Noronha, R., Akbarali, H., Malykhina, A., Foreman, R.D. and **Greenwood-Van Meerveld, B.** (2007). Changes in urinary bladder smooth muscle function in response to colonic inflammation. *Am. J. Physiol.* 293(5): F1461-F1467.

## 2008

86. Qin, C., Malykhina, A.P., Akbarali, H.I., **Greenwood-Van Meerveld, B.** and Foreman, R.D. (2008). Acute colitis enhances responsiveness of lumbosacral spinal neurons to colorectal distension in rats. *Dig. Dis. Sci.* 53(1): 141-148.

87. Venkova, K., Earnest, D.L. and **Greenwood-Van Meerveld, B.** (2008). Protective effects of tegaserod against indomethacin-induced gastric injury in the rat. *The Open Pharmacology Journal* 2: 10-16.
88. Venkova, K. and **Greenwood-Van Meerveld, B.** (2008). Therapeutic uses of ghrelin. *Current opinions in Investigational Drugs* 9(10): 1103-1107.
89. **Greenwood-Van Meerveld, B.** and Standifer, K.M. (2008). Methylnaltrexone in the treatment of opioid-induced constipation. *Clinical and Experimental Gastroenterology* 1:49-58.

#### **2009**

90. Venkova, K., Foreman, R.D. and **Greenwood-Van Meerveld, B.** (2009). Mineralocorticoid and glucocorticoid receptors in the amygdala regulate distinct responses to colorectal distension. *Neuropharmacology* 56(2): 514-521.
91. Winchester, W.J., Johnson, A., Hicks, G.A., Gebhart, G.F., **Greenwood-Van Meerveld, B.** and McLean, P.G. (2009). Inhibition of endothelial cell adhesion molecule expression improves colonic hyperalgaesia. *Neurogastroenterol. Motil.* 21(2): 189-196.
92. Venkova, K., Thomas, H., Fraser, G.J. and **Greenwood-Van Meerveld, B.** (2009). Effect of TZP-201, a novel motilin receptor antagonist, on gastrointestinal function in the musk shrew. *J. Pharm. Pharmacol.* 61: 367-373.
93. Fraser, G.L., Venkova, K., Hoveyda, H.R., Thomas, H. and **Greenwood-Van Meerveld, B.** (2009). Effect of ghrelin receptor agonist TZP-101 on colonic transit in a rat model of postoperative ileus. *Eur. J. Pharmacol.* 604(1-3): 132-137.
94. Maher, J., Johnson, A.C., Newman, R., Mendez, S., Hoffman, T.J., Foreman, R. and **Greenwood-Van Meerveld, B.** (2009). Effect of spinal cord stimulation in a rodent model of post-operative ileus. *Neurogastroenterol. Motil.* 21(6):672-e34.
95. Prodan, C.I., Bottomly, S.S., Vincent, A.S., Cowan, L.D., **Greenwood-Van Meerveld, B.**, Hollans, N.R. and Lind, L.E. (2009). Copper Deficiency after Gastric Surgery-a Reason for Caution. *The Am. J. of the Medical Sci.* 337(4): 256-258.
96. Venkova, K., Mann, W., Nelson, R. and **Greenwood-Van Meerveld, B.** (2009). Efficacy of ipamorelin, a novel ghrelin mimetic, in a rodent model of post operative ileus. *J. Pharmacol. Exp. Ther.* 329(3):1110-1116.
97. **Greenwood-Van Meerveld, B.** and Venkova, K. (2009). Ghrelin receptor agonists for the treatment of gastric emptying disorders. *Drugs for the Future* 34(2): 119-125.
98. Myers, B. and **Greenwood-Van Meerveld, B.** (2009) Role of anxiety in the pathophysiology of irritable bowel syndrome: importance of the amygdala (Review). *Frontiers in Enteric Neuroscience* 1: 1-10.
99. Campbell-Dittmeyer, K., Hicks, G.A., Earnest, D.L. and **Greenwood-Van Meerveld, B.** (2009). Increased colonic transit in rats produced by a combination of a cholinesterase inhibitor with a 5-HT4 receptor agonist. *Neurogastroenterol. Motil.* 21(11): 1197-e108.

#### **2010**

100. Myers, B. and **Greenwood-Van Meerveld, B.** (2010) Divergent effects of amygdala glucocorticoid and mineralocorticoid receptors in the regulation of visceral and somatic pain. *Am. J. Physiol. Gastrointest. Liver Physiol.* 298: G295-303.
101. Johnson, A.C., Myers, B., Lazovic, J., Towner, R. and **Greenwood-Van Meerveld, B.** (2010). Brain activation in response to visceral stimulation in rats with amygdala implants of corticosterone: An fMRI Study. *PlosOne* 5(1): e8573.
102. Chaloner, A., Rao, A., Al-Chaer, E.D. and **Greenwood-Van Meerveld, B.** (2010) Importance of neural mechanisms in colonic mucosal and muscular dysfunction in adult rats following neonatal colonic irritation. *International J. Developmental Neuroscience* 28:99-103
103. Venkova K and **Greenwood-Van Meerveld, B.** (2010) Exposure of the amygdala to elevated levels of corticosterone alters colonic motility in response to acute psychological stress. *Neuropharmacology* 58(7):1161-7.
104. Myers, B., and **Greenwood-Van Meerveld, B.** (2010) Elevated corticosterone in the amygdala leads to persistent increases in anxiety-like behavior and pain sensitivity. *Behav. Brain Res.* 214:465-469
105. Wiskur B and **Greenwood-Van Meerveld, B.** (2010) The aging colon: the role of enteric neurodegeneration in constipation. *Current Gastroenterology Reports* 12: 507-512.

106. Wiskur B, Tyler, K., Chaplan, S., Wickenden, A. and **Greenwood-Van Meerveld, B.** (2010) Reversal of colonic hypersensitivity by a novel TRPV1-receptor antagonist (JNJ-17203212). *Methods and Findings in Experimental and Clinical Pharmacology* 32(8):557-64.

#### 2011

107. Myers, B., Schulkin J and **Greenwood-Van Meerveld, B.** (2011) Sex steroids increase visceral sensitivity through an amygdala-dependent mechanism in a rodent model. *J.Pain.* 12:486-94.
108. Bitar K, **Greenwood-Van Meerveld, B.**, Saad R and Wiley, JW. (2011) Aging and gastrointestinal neuromuscular function: Insights from within and outside the gut. (Review). *Neurogastroenterol. Motil.* 23 (6): 490-501
109. **Greenwood-Van Meerveld, B.**, Kriesgsman M and Nelson R (2011) Ghrelin and a target for gastrointestinal motility disorders. *Peptides* 32 (11): 2352-6
110. Gustafsson J.K. and **Greenwood-Van Meerveld, B.** (2011) Amygdala activation by corticosterone alters somatic and visceral pain signaling in cycling female rats. *Am. J. Physiol.* 300(6):G1080-5.
111. **Greenwood-Van Meerveld, B.** Johnson, A.C., McRorie J. (2011) Effects of bifidobacterium infantis 35624 on post-inflammatory visceral hypersensitivity in the rat. *Dig. Dis Sci* 56 (11): 3179-86

#### 2012

112. Myers, B and **Greenwood-Van Meerveld, B.** (2012) Differential involvement of amygdala corticoid receptors in visceral hyperalgesia following acute and repeated stress. *Am. J. Physiol* 302(2):G260-6
113. Tran, L and **Greenwood-Van Meerveld, B.** (2012) Amygdala Lateralization in the Mediates Pain and Anxiety Behaviors in the Rat. *Physiol. Behav.* 105 (2): 371-5.
114. **Greenwood-Van Meerveld, B** and Prodan, CI. (2012) Evidence of abnormal intestinal function related to hypocupremia in a rodent model. *Neurogastroenterol. Motil.* 24 (3):283-7, e112.doi
115. Hoffman JM, Onesmo B. Balemba, Johnson, A, Tyler K, Zhao Hong, Galligan J, **Greenwood-Van Meerveld B.** Mawe GM. (2012) Activation of colonic mucosal 5HT-4 receptors enhances propulsive motility and inhibits colonic hypersensitivity. *Gastroenterology* 142(4):844-854.
116. Johnson, A.C., Tran L., Schulkin J, **Greenwood-Van Meerveld, B.** (2012) Importance of steroid receptor mediated mechanisms in the amygdala on visceral perception in a spontaneously anxious rat. *Neurogastroenterol. Motil;* 24(5): 479-86.
117. Camilleri M, Spiller R, Madsen, K **Greenwood-Van Meerveld B** and Verne N. (2012) Gut permeability in health and disease: an update. *Neurogastroenterol. Motil.* (Review) (in press)
118. Tran L, Wiskur B, **Greenwood-Van Meerveld B** (2012) The Role of the Bed Nucleus of the Stria Terminalis (BNST) in Stress-Induced Nociception. *Am J Physiol.* 302(11):G1301-9.
119. Tran, L, and **Greenwood-Van Meerveld, B.** (2012) Altered expression of glucocorticoid and CRF receptors in the rat central amygdala in response to elevated amygdala corticosterone. *Behavioral Brain Research.* 16;234 (2):380-385
120. **Greenwood-Van Meerveld B,** Tyler K, Mohammadi E, Pietra C. (2012) Efficacy of ipamorelin, a novel ghrelin agonist on gastric dysmotility in rodents. *Journal of Exp. Pharmacology* 149-155

#### 2013

121. Malykhina AP, Qin C, Lei Q, Pan XQ, **Greenwood-Van Meerveld, B.** Foreman RD (2013) Differential effects of intravesical resiniferatoxin on excitability of bladder spinal neurons upon colon-bladder cross-sensitization. *Brain Research* 1491:213-24.
122. Chaloner A, **Greenwood-Van Meerveld, B.** (2013) Comparison of age-dependent alterations in pain and behavior between rats strains. *Journal of the American Aging Association* 35: 1-10
123. Tran, L, Chaloner A and **Greenwood-Van Meerveld, B.** (2012) Importance of Epigenetic Mechanisms in Stress-Induced Visceral Pain. *Psychoneuroendocrinology* (in press)
124. Chaloner A, **Greenwood-Van Meerveld B.** (2013) Sexually Dimorphic Effects of Unpredictable Early Life Adversity on Visceral Sensitivity in a Rodent Model. *J Pain* (in press)

125. Chaloner A **Greenwood-Van Meerveld B.** (2013) The Effects of Early Life Adversity on Visceral Pain: Importance of Sex Differences. *Frontiers in Neuroendocrinology* (pending revisions)

#### Submitted

126. Tran L, Schulkin J, **Greenwood-Van Meerveld B.** The Role of Histone Deacetylation in Chronic Anxiety and Pain. *Nature Neuroscience*
127. Tran L, **Greenwood-Van Meerveld B.** Age-Associated Remodeling of the Intestinal Epithelial Barrier in a Nonhuman Primate Model. *Neurogastroenterol. Motil.*

#### In preparation

128. Tran L, **Greenwood-Van Meerveld B.** Neural control of intestinal smooth muscle in aging baboons. *Neurogastroenterol. Motil.*

#### Book Chapter, Letters and Editorials

1. **Greenwood, B.** (1985). A letter in response to the editorial review by Ken Hubel entitled, "Intestinal nerves and ion transport: Stimuli, reflexes and responses". *Am. J. Physiol.* 249: G546.
2. **Greenwood, B.,** Read, N.W. and Davison, J.S. (1987). Can contractility cause intestinal secretion. If so, what is the link between both events, ed. N.W. Read. *Proceedings of an international workshop. "The relationship between intestinal motility and epithelial transport"*. Janssen Press, pp. 125-138.
3. **Greenwood, B.,** Tremblay, L. and Davison, J.S. (1988). The relationship between sympathetically induced intestinal motility, fluid transport and transmural potential difference. *IN: Gastrointestinal and Hepatic Secretions: Mechanism and Control*, eds. J.S. Davison and E. Shaffer. The University of Calgary Press, pp. 265-269.
4. **Greenwood, B.** and Davison, J.S. (1988). Electrophysiological methods for investigating mucosal transport in intact tissue both *in vitro* and *in vivo*. *In: Gastrointestinal and Hepatic Secretions: Mechanism and Control*, eds. J.S. Davison and E. Shaffer. Calgary University Press, pp. 266-268.
5. **Greenwood, B.** (1989). Relationship between motility and secretion. *IN: A Guide to Gastrointestinal Secretion*, edited by J.S. Davison. Butterworth and Co., pp. 230-244.
6. **Greenwood, B.** and Davison, J.S. (1989). The effect of substance P and vasoactive intestinal polypeptide on intestinal contractility and transmural potential difference in the anesthetized ferret. *IN Nerves and the Gastrointestinal Tract*, ed. M. Singer MTP, pp. 684-688.
7. **Greenwood, B.** Mentoring and Networking within the American Motility Society *IN Am. Soc. Newsletter*
8. **Greenwood-Van Meerveld, B.,** Gunter, W.D., Shepard, J.D., Foreman, R. and Myers, D.A. Influence of anxiety on visceral sensitivity in rats (2000). In *Neurogastroenterology. From the Basics to the Clinic. Falk Symposium 112(108)*, pp: 763-769 ed. H.J. Kramer and M.V. Singer.
9. Venkova, K. and **Greenwood-Van Meerveld, B.** (2000). Prior Infection with an Enteric Nematode induces long-lasting Alterations in Enteric Neuromuscular Function. In *Neurogastroenterology. From the Basics to the Clinic. Falk Symposium 112(87)*, pp: 623-629, ed. H.J. Kramer and M.V. Singer.
10. Venkova, K., **Greenwood-Van Meerveld, B.** and Krier, J. (2002). Extrinsic Control of the Colon. Book Chapter 4: pp.171-187; *Innervation of the Gastrointestinal Tract* ed. Simon Brookes and Marcello Costa. Series Ed. G Burnstock.
11. **Greenwood-Van Meerveld, B.** and Venkova, K. (2004). *Gastrointestinal Pharmacology, an Overview Encyclopedia of Gastroenterology* (Elsevier) pp 172-177.
12. Foreman, R.D. and **Greenwood-Van Meerveld, B.** (2007). Neural Control of the Colon



13. Johnson AC, **Greenwood-Van Meerveld, B.** (2012) Evidence to support the non-genomic modulation of the HPA axis. *Steroids and Hormonal Science*. 3:2

**Patents:**

- P1. **Greenwood, B.** et al Pyrazolidinone CCK and Gastrin Antagonists and Pharmacological Formulations (#5,300,514) **Granted** April 5, 1994.
- P2. **Greenwood, B.** et al Pyrazolidinone CCK and Gastrin Antagonists and Pharmacological Formulations Thereof (#5,399,565) **Granted** March 21, 1995.
- P3. **Greenwood, B.** 2-methyl-thieno-benziapine (#04/044,844) **Granted** May 1995.
- P4. **Greenwood, B.** A Method for Treating GI Motility Disorders #1126US00 **Granted** June 1995.
- P5. **Greenwood, B.** and Nelson, D. Thieno [1,5] benzodiazepine use European Patent (# 95303788.4- 1270 ) **Granted** Aug. 1995.
- P6. **Greenwood, B.** Use Patent for Olanzapine (# 08/045,452) **Granted** Oct. 1995.
- P7. Flitter, W., Garland, W. and **Greenwood, B.** Amide Therapeutics for the Treatment of Inflammatory Bowel Disease and related cases (#6,486, 349B1) **Granted** Nov. 2002.
- P8. Flitter, W., Garland, W. and **Greenwood, B.** Indole Therapeutics for the Treatment of Inflammatory Bowel Disease and related cases **Granted** April. 2003.
- P9. **Greenwood-Van Meerveld, B.** Spinal cord stimulation as treatment for functional bowel disorders # 7,251,529 **Granted** July 2007.