Wesley Miner

PERSONAL PROFILE

Over 35 years experience in pharmacological research and drug discovery, plus a passion for writing. **Research Scientist and Author,** adept at lateral thinking. Currently considering new ways of utilizing experience and innovative talents for helping new drug discoverers.

PUBLICATIONS, ABSTRACTS and PRESENTATIONS

Hackett D., **Miner W.D.** and Nock P.E., 1981. Neurotoxic effects of lead: In- Organ directed toxicity: Chemical indices and mechanisms. Eds. S.S. Brown and D.S. Davis, Pergamon Press, pp. 235-242.

Miner W.D. and Sanger G.J., 1986. Inhibition of Cisplatin-induced vomiting by selective 5-hydroxytryptamine M-receptor antagonism. British Journal of Pharmacology 88: 497-499.

Miner W.D., Sanger G.J. and Turner D.H., 1987. Evidence that 5-hydroxytryptamine-3 receptors mediate cytotoxic drug and radiation evoked emesis. British Journal of Cancer 56: 159-162.

Bermudez J., Boyle E.A., **Miner W.D.** and Sanger G.J., 1988. The anti-emetic potential of the 5-hydroxytryptamine 3 receptor antagonist BRL-43694. British Journal of Cancer 58: 644-650.

Bermudez J., Fake C.S., Joiner K.A., Joiner G.F., King F.D., **Miner W.D.** and Sanger G.J., 1990. 5-Hydroxytryptamine (5-HT3) receptor antagonists. 1. Indazole and Indolizine 3-carboxylic acid derivatives. Journal of Medicinal Chemistry 33: 1924-1929.

Kuipers R., Izhar Z., Gerrits P., **Miner W.** and Holstege G., 2004. Location of bladder and urethral sphincter motoneurons. Neuroscience Letters 362: 57-60.

Miner W.D. et.al., 2007. The Wellcome Trust History of Twentieth Century Medicine: Volume 30: The discovery, use and impact of platinum salts as chemotherapy agents for cancer. Transcript of proceedings. Eds. Christie, D. and Tansey, E.; The Wellcome Trust for the History of Medicine, University College London.

Conlon K., **Miner W.**, McCleary S., and McMurray G., 2011. Identification of 5-HT2c mediated mechanisms involved in urethral sphincter reflexes in a model of urethral function. BJU International 110: E113 – E117.

PUBLICATIONS cont.

Miner W., Piper-Brown S., Jethwa S., Kirkup A. and McMurray G., 2014. Urinary bladder motility: Characterization using sonomicrometry techniques. (Submitted to the American Journal of Physiology).

Miner W.D. et al, 2013. Wellcome Witnesses to Contemporary Medicine: Volume 47: Drugs Affecting 5-HT Systems. Transcript of proceedings. Eds. Overy C. and Tansey E. Modern Biomedicine Research Group, Queen Mary, University of London.

McRitchie B. and **Miner W.D.**, 1985. Dopamine antagonist activity is not a prerequisite for increasing gastric motility with benzamides. British Journal of Pharmacology 84: 100P.

Miner W.D., Sanger G.J. and Turner D.H., 1986. Comparison of the effect of BRL-24924, metoclopramide and domperidone on Cisplatin-induced emesis. British Journal of Pharmacology 88: 374P.

Boyle E.A., **Miner W.D.** and Sanger G.J., 1987. Different anti-cancer therapies evoke emesis by mechanisms that can be blocked by the 5-HT3 receptor antagonist BRL-43694. British Journal of Pharmacology 91: 418P.

Boyle E.A., **Miner W.D.** and Sanger G.J., 1987. Anti-emetic activity of BRL-43694, a novel 5-HT3 antagonist. British Journal of Cancer 56: 227.

Quinn P., **Miner W.D.** and Wallis R.M., 1991. Cholecystokinin-induced intestinal motility: A novel method for evaluating inhibitors of intestinal motility. British Journal of Pharmacology 104: 153P.

Wallis R.M., **Miner W.D.** and Quinn P., 1993. Zamifenacin: A potent and selective Muscarinic M3 antagonist. British Journal of Pharmacology 109: 37P.

Wallis R.M., Alker D., Burges R.A., Cross P.E., **Miner W.D.**, Newgreen D.T. and Quinn P., 1994. Zamifenacin: A novel Muscarinic M3 antagonist. Gastroenterology 104(4): A 597.

Quinn P., McIntyre P., **Miner W.D.** and Wallis R.M., 1996. Profile of Darifenacin, a selective Muscarinic M3 antagonist. British Journal of Pharmacology 119: 198P.

Lightbown I.D., **Miner W.D.** and Gale J.D., 2002. The anti-emetic activity of S(-) Eticlopride against morphine- and ipecacuanha- induced emesis. British Journal of Pharmacology 136: 61P.

Miner W.D. and Westbrook S., 2005. The effect of duloxetine on bladder leak point pressure. Proceedings of the British Pharmacological Society at http://www.pa2online.org/abstracts/Vol3Issue2abst091P.pdf

PUBLICATIONS cont.

Miner W.D., Casey J.H. and Gale J.D.**,** 2005. $GABA_B$ agonists block morphine-induced emesis. Proceedings of the British Pharmacological Society at http://www.pa2online.org/abstracts/Vol3Issue2abst033P.pdf

McMurray G. and **Miner W.D.**, 2005. The effect of the $5\text{-}HT_{2C}$ agonist Ro 60-0175 on urinary cystometric parameters. FASEB Journal 19: 320.3 A.

Cooper S.M., King F.D., McClelland C.M., McRitchie B., **Miner W.D.**, Sanger G.J. and Turner D.H., 1986. BRL-24924: A potent gastric motility stimulant and 5-HT M-receptor antagonist. Presented at Medicinal Chemistry Gordon Research Conference, July 1986.

Fake C.S., Boyle E.A., King F.D., McClelland C.M., **Miner W.D.** and Sanger G.J., 1987. BRL-43694: A potent 5-HT3 receptor antagonist which inhibits emesis induced by cytotoxic drugs or radiation. Presented at Medicinal Chemistry Gordon Research Conference, August 1987.

Sanger G.J., Boyle E.A., McClelland C.M., **Miner W.D.** and Moss H.E., 1987. Functional 5-HT3 receptor antagonism by BRL-43694. Presented at Xth International Congress of Pharmacology, August 1987.

Wallis R.M., McRitchie B. and **Miner W.D.**, 1987. Effects of nifedipine on intestinal motility. Presented at Xth International Symposium on G-I Motility, September 1987.

Conlon K., **Miner W.,** Christy C., McCleary S., and McMurray G., 2005. Identification of 5-HT2C mediated mechanisms involved in urethral sphincter reflexes. Presented at Neuroscience meeting, Washigton DC., November, 2005.

Christy C., Phillips S., McMurray G., **Miner W.**, Molloy E., Westbrook S., Kuipers R. and Holstege G., 2005. Integration of Multi-Disciplinary Basic Science to Identify Key Serotonergic Receptor Players in Controlling Urethral Sphincter Tone to Advance the Treatment of Stress Urinary Incontinence. Presented at Set For Britain conference, House of Commons, London.

McMurray G. and **Miner W.**, 2006. The 5-HT2C receptor agonists Ro-60-0175 and CP-809101 increase voided volume. Presented at 15th World Congress of Pharmacology, Beijing, July, 2006.

Allard J. and **Miner W.**, 2013. The use of spinal wide dynamic range neuron recording as a screen for candidate analgesic drugs. Presented at Neuroscience 2013, San Diego, CA.

Allard J. and **Miner W**., 2015. Olfactory bulb evoked field potential by electrical stimulation of the olfactory epithelium: development of a potential Nav1.7 channel blocker assay. Presented at Neuroscience 2015, Chicago, Ill.

PUBLICATIONS cont.

Allard J., Palea S. and **Miner W**., 2016. Which subset of C-fibres contributes to the TTX resistant component of the spinal evoked field potential. Presented at 16th World Congress on Pain, Yokohama, Japan.

PERSONAL INVOLVEMENT IN DRUG DISCOVERY PROGRAMMES .

KYTRIL; granisetron (5-HT3 antagonist): Initial research, design and set-up of studies that investigated the neuropharmacology involved in emetic reflexes. Experimental studies led to my discovery of the potent anti-emetic activity of the 5-HT3 antagonists, and the discovery and development of **granisetron** (KYTRIL) and other related drugs such as **ondansetron** (ZOFRAN) and **tropisetron** (NAVOBAN).

Renzapride (5-HT4 agonist): Experimental research and investigation of gastrointestinal reflexes which coordinate upper gastrointestinal motility. Research into means of investigating gastrointestinal motility through non-invasive techniques.

ENABLEX; darifenacin (M3 muscarinic antagonist): Experimental research on anticholinergic mechanisms involved in visceral reflexes. Member of discovery team that first identified darifenacin (now marketed for treatment of urinary incontinence).

UK-112,214 (dual PAF/ histamine H1 antagonist): Discovery project leader for projects identifying treatments for allergic rhinitis.

PF-184,298 (Selective serotonin, noradrenaline reuptake inhibitor): Discovery and profiling of this compound, which entered clinical trials for stress urinary incontinence.

EMPLOYMENT .

2012- Present	***E-PHYS*** Faculte de Medecine et de Pharmacie 28 Place Henri Dunant 63001 Clermont-Ferrand, France	***Senior Scientific Advisor*** Business and Experimental studies
1986- 2009	***Pfizer*** Global Research & Development Discovery Biology Department Sandwich, Kent, England	***Principal Scientist*** Gastrointestinal Diseases Allergic Diseases Urological Diseases
1982-1986	***Beecham Pharmaceuticals (now GlaxoSmithKline)*** Research Division Harlow, Essex, England	***Higher Scientific Officer*** Gastrointestinal Diseases Project
1980-1982	***Inveresk Research International*** Musselburgh, Scotland	***Research Scientist*** Pharmacology Section

EDUCATION and QUALIFICATIONS .

1976-1980	***University of Edinburgh*** Edinburgh, Scotland	B.Sc. Biological Sciences (1979) B.Sc. (Hons). Physiology (1980)

PRIZES and AWARDS.

- 1975: Prize for ***Scottish Certificate of Education*** part-time student (Perth College of Further Education)

- 1998: Discovery team member for G. Sanger's award: 1998 ***PhARMA (U.S.A.) Drug Discoverers Award*** for the discovery of granisetron (KYTRIL).

- 2014: Short listed for award presented by the British Pharmacological Society (venue: The House of Commons, Westminster Palace, London.) For '**United Kingdom Pharmacology on the map.**

PATENTS.

- Co-inventor on worldwide patents relating to the ***discovery of 5-HT3 antagonists as anti-emetics*** for use in treatment of nausea and vomiting. (GlaxoSmithKline).

- Co-inventor on worldwide patents for ***drug treatments of urinary incontinence***. (Pfizer).

SOCIETY MEMBERSHIP.

- Elected member of ***British Pharmacological Society*** (1989). Election based on novel research investigating the neuropharmacology of emetic reflexes.

- Elected member of ***American Society for Pharmacology and Experimental Therapeutics*** (2005). Election based on continued contributions to pharmacological research.

- ***Society for Drug Research*** (1985).

ADDITIONAL

- External PhD examiner for **The University of Groningen Medical School**.

- Invited guest lecturer to **The Dutch Anatomical Society (2002).**

- Invited guest speaker to **The Wellcome Trust's History of Twentieth Century Medicine Group: Clinical pharmacology in the United Kingdom *c.*1950-2000: Industrial and regulatory aspects (2007).**

ADDITIONAL cont.

- Current Close Scientific Research Associates:

  Dr. Julien Allard: Chairman and CEO: E-PHYS, Clermont-Ferrand, France. Areas of expertise include novel electro- physiological, in vivo techniques for discovering primary mechanisms involved in peripheral and central pain pathways.

  Professor Gert Holstege: Chairman and Head of Center of Uroneurology, The University of Groningen, The Netherlands. Areas of expertise include CNS pathways involved in urological and sexual reflexes in humans and lower species.

- External referee and reviewer of manuscripts submitted for publication to:

  Journal of Physiology; British Journal of Pharmacology; New England Journal of Medicine; Journal of Comparative Neurology; Journal of Neuroscience; Journal of Urology.