

Curriculum vitae

Judith E. Humphries

Visiting Assistant Professor,
Department of Biology,
Lawrence University,
117, East Boldt Way,
Appleton WI 54911
U.S.A.

Email: judith.humphries@lawrence.edu

Education

Undergraduate:

1990-1994 Queen's University Belfast, Northern Ireland
Biological Sciences B. Sc. (Hons) First Class
Honors Project: The effect of increasing carbon dioxide levels on the stomatal density of Scot's Pine needles, *Pinus sylvaticus*.

Postgraduate:

1994-1997 The Queen's University of Belfast, Northern Ireland
Doctoral Degree (PhD)
Supervisors: Prof. D. W. Halton, Prof. C. Shaw
PhD. Project: The neurobiology and physiology of the trematode, *Echinostoma caproni*, and host-parasite interactions in the ICR mouse.

Employment

- 2007 - 2009 Visiting Assistant Professor, Lawrence University, Appleton, WI. Job responsibilities include teaching Parasitology, Bioinformatics, Immunology, Freshman Studies and Integrative Biology: heterotrophs. In addition I have mentored student research projects and am continuing research on the interaction between the snail host, *Biomphalaria glabrata* and the trematode parasite *Schistosoma mansoni*.
- 2007 Lecturer of Parasitology, Institute of Biological Sciences, University of Wales, Aberystwyth. Job responsibilities include; teaching Parasitology, Principles of Animal Physiology and Environmental Animal Physiology, and coordinating Biological Co-ordination and Function. In addition, to continuing research on the interaction between *B. glabrata* and *S. mansoni*.
- 2003-2006 Academic Staff – Assistant Researcher, Department of Pathobiological Sciences, UW-Madison, under the supervision of Dr. T. Yoshino.
Aims: to study the interaction between the parasite *Schistosoma mansoni* and its intermediate host, the snail *Biomphalaria glabrata*, in particular to identify the molluscan cell signaling molecules and receptors which might be involved.
- 2002-2003 Postdoctoral Research Associate, Department of Biomedical Sciences, Iowa State University, under the supervision of Dr. T. Day.

- Aims: To identify native peptides and peptide receptors in adult *Schistosoma mansoni*, and examine the downstream cell signaling pathways.
- 1998-2001 Postdoctoral Research Associate, Department of Pathobiological Sciences, UW-Madison, under the supervision of Dr. T. Yoshino.
Aims: To investigate the adhesive and spreading behaviors of *Biomphalaria glabrata* embryonic (Bge) cell line and hemocytes, and signal transduction pathways which might be involved.
- 1997-1998 Research Assistant, Department of Haematology, Belfast City Hospital, Belfast, Northern Ireland.
Aims: To establish methods for the isolation and cryopreservation of peritoneal macrophages from CAPD (Continuous ambulatory peritoneal dialysis) patients, and to subsequently test the viability of thawed macrophages post cryopreservation.

Presentations at scientific meetings

Poster presentations at:

- 2009 The Annual meeting of the American Society of Parasitologists
2001, 2005 Molecular Helminthology: An integrated approach – Keystone Symposia
1995 The British Society for Parasitology Spring meeting

Oral presentations have included:

- 2006 The Eleventh International Congress of Parasitology Meeting
2002 The Tenth International Congress of Parasitology Meeting
1999, 2000, 2005 Annual meetings of the American Society of Tropical Medicine and Hygiene
1997, 1999 The Annual meetings of the American Society of Parasitologists
1996-1998, 2007 The British Parasitology Spring Meetings

Awards

- 2008 Excellence in Science Fund, Lawrence University – awarded to fund student research (\$6,000)
2007 Research Grant from the Royal Society of London, United Kingdom (£15,000)
2007 University Research Grant, University of Wales, Aberystwyth, Wales, United Kingdom (£6,000)
2006 Academic Staff Professional Development grant – awarded to allow attendance at the 11th International Congress of Parasitology (ICOPA XI) meeting in Glasgow UK, August 2006.
2005 Keystone Symposia Travel scholarship – awarded for travel and lodging expenses incurred while attending Molecular Helminthology: An integrated approach – Keystone Symposia
1997 Emily Sarah Montgomery Travel scholarship – awarded for travel to American Society of Parasitology Annual Meeting, Nashville, USA
1994 Hugh Wisnom Award – awarded for obtaining First Class Honors degree

Publications

Humphries, J.E. and Yoshino, T.P. (2008). Regulation of hydrogen peroxide release in circulating hemocytes of the planorbid snail *Biomphalaria glabrata*. *Developmental and Comparative Immunology*, 32: 554-562.

Omar, H. H., **Humphries, J. E.**, Larsen, M. J., Kubiak, T. M., Geary, T. G., Maule, A. G., M.J. Kimber, M. J. and Day, T. A. (2006). Identification of a platyhelminth neuropeptide receptor. *International Journal for Parasitology*, 37(7): 725-733.

Humphries, J. E. and Yoshino, T.P. (2006). *Schistosoma mansoni* excretory-secretory products stimulate a p38 signaling pathway in *Biomphalaria glabrata* embryonic (Bge) cells. *International Journal for Parasitology* 36: 37-46.

Yoshino, T. P., Vermeire, J. J. and **Humphries, J. E.** (2005). Signal transduction at the host-parasite interface. In: *Parasitic flatworms: Molecular Biology, Biochemistry, Immunology and Physiology*. (ed. A. G. Maule and N. J. Marks) CAB International.

Vermeire, J. J., **Humphries, J. E.** and Yoshino, T. P. (2005). Signal transduction in larval trematodes: putative systems associated with regulating larval motility and behavior. *Parasitology*, 131 Suppl: S57-70.

Humphries, J. E., Kimber, M. J., Barton, Yi-Wen, Hsu, W., Marks, N. J., Greer, B., Harriott, Maule, A. G., and Day, T. A. (2004). Structure and Bioactivity of Neuropeptide F from the Human Parasites *Schistosoma mansoni* and *Schistosoma japonicum*. *Journal of Biological Chemistry* 279: 39880 - 39885

Humphries, J. E. and Yoshino, T. P. (2002). Cellular receptors and signal transduction in molluscan hemocytes: connections with the innate immune system of vertebrates. *Integrative and Comparative Biology*, 43(2): 305-312.

Yoshino, T. P., Boyle, J. P. & **Humphries, J. E.** (2001). Receptor-ligand interactions and cellular signaling at the host-parasite interface. *Parasitology*, 123 Suppl: S143-57.

Humphries, J. E., Elizondo, L. and Yoshino, T. P. (2001). Protein kinase C regulation of cell spreading in the molluscan *Biomphalaria glabrata* embryonic (Bge) cell line. *Biochimica et Biophysica Acta*, 1540(3): 243-52.

Humphries, J. E., Mousley, A., Halton, D. W., Maule, A. G., & Halton, D. W. (2000). Neuromusculature – structure and functional correlates. In: *Echinostomes as experimental models for biological research*. (ed. B. Fried & T. Grazyck). Kluwer Academic publishers, Boston.

Humphries, J. E., Corr, B., Alexander, H. D., Mc Connell, J., Bell, A. L., Markey, G. M. & Morris, T. C. (1999). Why discard the peritoneal macrophages of patients on CAPD? *British Journal of Haematology*, 105(1): 319-20.

Humphries, J. E., Reddy, A. and Fried, B. (1997). Infectivity and growth of *Echinostoma revolutum* (Froelich, 1802) in the domestic chick. *International Journal for Parasitology* 27(1): 129-30.

Humphries, J. E., Halton, D. W., Johnston, R. N., Maule, A. G., Johnston, C. F. & Shaw, C. (1997). Cholinergic, serotonergic and peptidergic components of the nervous system of *Haematoloechus medioplexus* (Trematoda: Digenea), characterised by cytochemistry. *International Journal for Parasitology* 27, 517-525.

Humphries, J. E. & Fried, B. (1996). Histological and histochemical studies on the paraesophageal glands in cercariae and metacercariae of *Echinostoma revolutum* and *E. trivolvis*. *Journal of Helminthology* 70, 299-301.