CURRICULUM VITAE

PERSONAL DETAILS

Name: Leah W. Hammer

Address: Physiology and Pharmacology
West Virginia School of Medicine
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ACADEMIC QUALIFICATIONS

1991-1994 Ph.D. (Dept Pharmacology, Monash University, Victoria, Australia)
Thesis Title: Changes in cardiovascular reactivity of the rat during pregnacy: a role for the vascular endothelium.

1990 B.Sc. Hons (Ist Class, Dept Pharmacology, Monash University, Victoria, Australia).
Thesis Title: Assessment of the dopaminergic properties of N-methyl-N-n-propyl 2-aminotetralin.

1989 B.Sc. (Monash University, Victoria, Australia)
Majors: Pharmacology & Toxicology; Zoology

PROFESSIONAL EXPERIENCE

1991-1994 Practical Class Demonstrator (Casual), Dept. Pharmacology, Monash University, Melbourne, Australia.

1994-1995 Demonstrator/Tutor (Casual), Human Physiology, School of Biological and Chemical Sciences, Deakin University, Melbourne, Australia.

1995-1997 Research Fellow, Pharmacology Unit, Dept. Medical Laboratory Science, RMIT University, Melbourne, Australia.

1997-1998 Medical Representative, Wyeth Pharmaceuticals, Melbourne, Australia.

1998 Lecturer, Pharmacology (Casual), School of Biological Sciences, Victorian University of Technology, Melbourne, Australia.

1998-1999 Research Officer (Part-time), Demonstrator/Lecturer (Casual), Dept. Pharmacology, Monash University, Melbourne, Australia.

1999-2000 Research Associate, Dept. Physiology and Biophysics, University of Mississippi Medical Centre, Jackson, Mississippi, USA

2000-2002 Instructor, Dept. Physiology and Biophysics, University of Mississippi Medical Center, Jackson, Mississippi, USA.

2002-current Research Assistant Professor, Dept Physiology and Pharmacology, West Virginia University, Health Sciences Center, West Virginia, USA

Academic and Professional Honours

1986 Scholarship (Rotary) A.I.D.C. National Science Summer School, Canberra, Australia.

1991-1994 Australian Postgraduate Research Award/Australian Postgraduate Award

1991 National Student Travel Grant (Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists)

1992 National Student Travel Grant (Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists)

1994 Monash University Postgraduate Writing-Up Award

1994 International Travel Grant (Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists)

1994 Grant-in-Aid for International Conference Attendance (Monash University, Melbourne, Australia)

1995-1997 Postdoctoral Research Fellowship (RMIT University, Melbourne, Australia)

1999 Postdoctoral Travel Grant (National Heart Foundation of Australia)

2000 Young Investigator Travel Award, Cardiovascular Section of the American Physiological Society.

GRANT SUPPORT:

1995-1997 Royal Melbourne Institute of Technology Postdoctoral Fellowship: "Role of Endothelin-1 in Vascular Reactivity, *in vivo*."

7/1/00 – 6/30/02 American Heart Association Postdoctoral Fellowship: "The Role of ATP in Metabolic Regulation of Blood Flow".

Pending: NIH R21: "Age, Gender and Microcirculation"

SKILLS AND EXPERIENCE:

Research Interests:
- cardiovascular physiology and pharmacology
- microcirculation
- aging
- women's health

Teaching Experience

Department of Pharmacology, Monash University: 3rd and 4th year undergraduate BSc. students.
Department of Biological Science, VUT, Footscray: 2nd year nursing students (pharmacology).
School of Biological and Chemical Sciences, Deakin University: 2nd year undergraduate Science, Physical Education, Health Promotions and Education students (physiology).
RMIT University: 2nd and 4th year undergraduate students (pharmacology).
University of Mississippi: 1st year Medical students (physiology labs)

RESEARCH

Publications

Hammer, L.W., Davis, E.A. & Story, M.E. (1992). N-methyl-N-n-propyl-2-aminotetralin (MePr-2-AT) lowers blood pressure in anaesthetized rats via stimulation of DA_2 receptors. *Pharmacol. Comm.*, **1**: 361-366.

Hammer, L.W., Storey, M.E. & Davis, E.A. (1996). Nω-nitro-L-arginine (NOLA) increases pressor responses to noradrenaline in late pregnant but not non-pregnant rats anaesthetized with α-chloralose and sodium pentobarbitone. *Pharmacol. Comm.*, **7**: 157-163.
Crachi, M.T., **Hammer, L.W.** & Hodgson, W.C. (1999). A pharmacological examination of venom from the Papuan taipan (*Oxyuranus scutellatus canni*). *Toxicon*, **37**:1721-1734.

Crachi, M.T., **Hammer, L.W.** & Hodgson, W.C. (1999). The effects of antivenom on the in vitro neurotoxicity of venoms from the taipans *oxyuranus scutellatus, oxyuranus microlepidotus* and *oxyuranus scutellatus canni*. *Toxicon*, **37**:1771-1778.

Hammer, L.W., Ligon A.L., Hester, R.L. (2001). Differential inhibition of functional dilation of small arterioles by indomethacin and glibenclamide. *Hypertension,* 37(2 Part 2):599-603.

Hammer, L.W., Ligon, A.L. & Hester, R.L. (2001). ATP-mediated release of arachidonic acid metabolites from venular endothelium causes arteriolar dilation. *Am J Physiol Heart Circ Physiol.,* 280(6):H2616-22.

Choi, J., **Hammer, L.W**. and Hester, R.L. (2002). Calcium-dependent synthesis of prostacyclin in ATP-stimulated venous endothelial cells. *Hypertension,* 39(2):581-585.

Hester, R.L. and **Hammer, L.W**. (2002). Venular-arteriolar communication in the regulation of blood flow. *Am. J. Physiol. Reg. Int. Comp. Physiol.* 282:R1280-R1285.

ABSTRACTS

Hammer, L.W., Davis, E.A. & Story, M.E. (1990). Peripheral dopamine receptors may be involved in the hypotensive actions of N-methyl-N-propyl-2-aminotetralin. *Clin. exp. Pharmacol. Physiol.,* **Suppl. 17:** 29.

Hammer, L., Davis, E.A. & Story, M.E. (1991). The rat autoperfused uterine vascular bed. *Clin. exp. Pharmacol. Physiol.,* **Suppl. 18:** 12.

Hammer, L.W., Okuniewski, R. & Davis, E.A. (1993). Endothelial modulation of rat uterine vascular reactivity may be influenced by ovarian steroids. *Clin. exp. Pharmacol. Physiol.,* **Suppl. 1:** 28.

Okuniewski, R., **Hammer, L.W**. & Davis, E.A. (1993). The effect of Nϖ-nitro-L-arginine (NOLA) on pressor responses to NA and angiotensin II (AII) varies with pregnancy and steroid hormone treatment in the rat. *Clin. exp. Pharmacol. Physiol.,* **Suppl. 1**: 54

Davis, E.A., **Hammer, L.W**. & Okuniewski, R. (1994). Ovarian steroids may selectively regulate endothelial modulation of uterine vascular reactivity during pregnancy. *Can. J. Physiol. Pharmacol.,* **72 (Suppl. 1):** 185.

Hammer, L.W., Davis, E.A. & Story, M.E. (1994). The rat autoperfused uterine vascular bed. *Can. J. Physiol. Pharmacol.,* **72 (Suppl. 1):** 185.

Hammer, L.W. & Reid, J.J. (1996). ET-1 enhances constrictor responses to noradrenaline in the mesenteric vasculature of anaesthetized rats. *Proc. Australas. Soc. Clin. Expet. Pharm. Tox.*, pg 100.

Hammer, L.W., Ligon, A.L. & Hester, R.L. (2000). Role for ATP in regulation of arteriolar diameter in the microcirculation of hamsters. *Proc. Experimental Biology, FASEB J.* **14(4):**A142

Hammer, L.W., Ligon, A.L. & Hester, R.L. (2000). Release of prostanoids from paired venules regulates functional vasodilation of 3rd-order but not 4th-order arterioles. *54th Annual Fall Conference & Scientific Sessions of the Council for High Blood Pressure Research.*

Choi, J, **Hammer, L.W.,** Ligon, A.L., Overstreet, C.R. and Hester, R.L. (2001) ATP-stimulated calcium-dependent synthesis of prostacyclin from venous endothelial cells. *55th Fall Conference of the High Blood Pressure Research Council, September, 2001, Chicago, IL.*

Hammer, L.W., Choi, A.L., Ligon, A.L., Overstreet, C.R. and Hester, R.L. (2001). Evidence of a role for ATP-stimulated release of venular prostacyclin in functional hyperemia. *7th World Congress for Microcirculation, August, 2001, Sydney, Australia.*

Hammer, L.W., Overstreet, C.R. & Hester, R.L. (2001) Inhibition of functional hyperemia by minimal concentrations of indomethacin in hamster cremaster muscle. *Proceedings for Experimental Biology, FASEB J. 15(4):*A123.

Hammer, L.W., Overstreet, C.R., Burton, A.R., Choi J. & Hester, R.L. (2002) ATP stimulates the release of prostacyclin from perfused veins from hamster hindlimb. *Proceedings for Experimental Biology, FASEB J. 16(3pt2),* A823.