

# Physiology Publications 2005

## A5 - Textbooks

Bell C, Kidd C & Morgan TO. 2005. *Case-Based Medical Physiology*. Massachusetts, United States of America: Blackwell Publishers.

## B1 - Chapters in Research Books

Lynch GS, Shavlakadze T & Grounds MD. 2005. Strategies to reduce age-related skeletal muscle wasting. In SIS Rattan (ed), *Aging Interventions and Therapies*. Singapore, Singapore: World Scientific Publishing Co, pp. 63-84.

## B2 - Chapters in Books

Morgan TO. 2005. Principles of Individualized Hypertension Management. In EJ Battegay, GYH Lip & GL Bakris (eds), *Hypertension Principles and Practice*. United States of America: Taylor & Francis, pp. 405-420.

## C1 - Journal Articles - Refereed

Alexiou T, Boon W, Denton DA, Di Nicolantonio R, Walker LL, McKinley M & Campbell DJ. 2005. Angiotensinogen and angiotensin-converting enzyme gene copy number and angiotensin and bradykinin peptide levels in mice. *Journal of Hypertension*. **23**:945-954.

Andrew T, Antoniadou L, Scurrah KJ, MacGregor A & Spector T. 2005. Risk of wrist fracture in women is heritable and is influenced by genes that are largely independent of those influencing BMD. *Journal of Bone and Mineral Research*. **20**(1):67-74.

Barrett GL, Greferath U, Barker PA, Trieu J & Bennie AM. 2005. Co-expression of the p75 neurotrophin receptor and neurotrophin receptor-interacting melanoma antigen homolog in the mature rat brain. *Neuroscience*. **133**(2):381-392.

Bergman PB, Moravski CJ, Edmondson SR, Russo V, Bach LA, Wilkinson-Berka JLA & Werther G. 2005. Expression of the IGF system in normal and diabetic transgenic (mRen-2)27 Rat Eye. *Investigative Ophthalmology & Visual Science*. **46**(8):2708-2715.

Bertrand PP, Paravitane UT, Chavez C, Gogos A, Jones M & Van Den Buuse M. 2005. The effect of low estrogen state on serotonin transporter function in mouse hippocampus: A behavioral and electrochemical study. *Brain Research*. **1064**:10-20.

Boyer CP, Galicki K, Kollar J & Thomas EA. 2005. Einstein metrics on exotic spheres in dimensions 7, 11, and 15. *Experimental Mathematics*. **14**(1):59-64.

Burton PR, Scurrah KJ, Tobin MD & Palmer L. 2005. Covariance components models for longitudinal family data. *International Journal of Epidemiology*. **34**(5):1063-1077.

Cairns MJ, Burns P, Di Nicolantonio R, McKinley M & Mathai ML. 2005. Influence of brain angiotensin on thermoregulation and hydromineral balance during pregnancy in rats. *Journal of Applied Physiology*. **98**(5):1813-1819.

Chambers JD, Bornstein JC, Sjovald H & Thomas EA. 2005. Recurrent networks of submucous neurons controlling intestinal secretion: a modeling study. *American Journal of Physiology - Gastrointestinal and Liver Physiology*. **288**(5):G887-G896.

Christopher MJ, Rantza C, McConell GK, Kemp BE & Alford FP. 2005. Prevailing hyperglycemia is critical in the regulation of glucose metabolism during exercise in poorly controlled alloxan-diabetic dogs. *Journal of Applied Physiology*. **98**:930-939.

Cluberton LJ, McGee SL, Murphy R & Hargreaves IM. 2005. Effect of carbohydrate ingestion on exercise-induced alterations in metabolic gene expression. *Journal of Applied Physiology*. **99**(4):1359-1363.

Curl CL, Bellair CJ, Harris T, Allman BE, Harris PJ, Stewart A, Roberts A, Nugent KA & Delbridge LM. 2005. Refractive index measurement in viable cells using quantitative phase-amplitude microscopy and confocal microscopy. *Cytometry Part A*. **65a**:88-92.

Di Nicolantonio R, Westcott KT, Koutsis K & Wlodek ME. 2005. Lack of evidence for a role for either the in utero or suckling periods in the exaggerated salt preference of the spontaneously hypertensive rat. *Physiology & Behavior*. **86**(4):500-507.

Domenighetti AAM, Wang Q, Egger M, Richards SM, Pedrazzini T & Delbridge LM. 2005. Angiotensin II-mediated phenotypic cardiomyocyte remodeling leads to age-dependent cardiac dysfunction and failure. *Hypertension*. **46**(2):426-432.

Ellis JA, Panagiotopoulos S, Akdeniz A, Jerums G & Harrap SB. 2005. Androgenic correlates of genetic variation in the gene encoding 5 $\alpha$ -reductase type 1. *Journal of Human Genetics*. **50**:534-537.

Gazina E, Harrison D, Jefferies M, Tan H, Williams DA, Anderson D & Petrou S. 2005. Ion transport blockers inhibit human rhinovirus 2 release. *Antiviral Research*. **67**(2):98-106.

Gregorevic P, Ryall JG, Plant DR, Sillence MN & Lynch GS. 2005. Chronic B-agonist administration affects cardiac function of adult but not old rats, independent of B-adrenoceptor density. *American Journal of Physiology - Heart and Circulatory Physiology*. **289**(1):H344-H349.

Gurrin LC, Scurrah KJ & Hazelton ML. 2005. Tutorial in biostatistics: spline smoothing with linear mixed models. *Statistics in Medicine*. **24**:3361-3381.

Harcourt LJ, Holmes AG, Gregorevic P, Schertzer JD, Stupka N, Plant DR & Lynch GS. 2005. Interleukin-15 administration improves diaphragm muscle pathology and function in dystrophic *mdx* mice. *American Journal of Pathology*. **166**(4):1131-1141.

Henstridge DC, Kingwell BA, Formosa M, Drew BG, McConell GK & Duffy S. 2005. Effects of the nitric oxide donor, sodium nitroprusside, on resting leg glucose uptake in patients with type 2 diabetes. *Diabetologia*. **48**:2602-2608.

Hiranyachattada S, Saetew S & Harris PJ. 2005. Acute effects of candesartan on rat renal haemodynamics and proximal tubular reabsorption. *Clinical and Experimental Pharmacology and Physiology*. **32**:714-720.

Martin JH, Kelly DJ, Zhang Y, Gauci SA, Cox AJ, See FCP, Krum H, Wilkinson-Berka JLA & Gilbert RE. 2005. Trilast attenuates cardiac matrix deposition in experimental diabetes: role of transforming growth factor- $\beta$ . *Cardiovascular Research*. **65**:694-701.

McConell GK, Lee-Young RS, Chen Z, Stepto NK, Huynh NN, Stephens TJ, Canny BJ, Kemp B, Kemp BE & 2005. Short-term exercise training in humans reduces AMPK signalling during prolonged exercise independent of muscle glycogen. *Journal of Physiology - London*. **568**:665-676.

McConell GK, Shinewell J, Stephens TJ, Stathis CG, Canny B & Snow R. 2005. Creatine supplementation reduces muscle inosine monophosphate during endurance exercise in humans. *Medicine and Science in Sports and Exercise*. **37**(2061):2054.

McCoy MR, Couch D, Duncan ND & Lynch GS. 2005. Evaluating an Internet weight loss program for diabetes prevention. *Health Promotion International*. **20**(3):221-228.

Monro R, Bornstein JC & Bertrand PP. 2005. Slow excitatory post-synaptic potentials in myenteric AH neurons of the guinea-pig ileum and reduced by the 5-hydroxytryptamine<sub>7</sub> receptor antagonist SB 269970. *Neuroscience*. **134**(3):975-986.

Montanaro M, Allen AM & Oldfield BJ. 2005. Structural and functional evidence supporting a role for leptin in central neural pathways influencing blood pressure in rats. *Experimental Physiology*. **90**(5):689-696.

Peterson EW, Carey AL, Sacchetti M, Steinberg G, MacAulay SL, Febbraio MA & Pedersen BK. 2005. Acute IL-6 treatment increases fatty acid turnover in elderly humans in vivo and in tissue culture in vitro. *American Journal of Physiology - Endocrinology and Metabolism*. **288**(1):E155-E162.

Plant DR, Beitzel F & Lynch GS. 2005. Length-tension relationships are altered in regenerating muscles of the rat after bupivacaine injection. *Journal of Applied Physiology*. **98**(6):1998-2003.

Sarlos S & Wilkinson-Berka JLA. 2005. The renin-angiotensin system and the developing retinal vasculature. *Investigative Ophthalmology & Visual Science*. **46**(3):1069-1077.

Schertzer JD, Plant DR, Ryall JG, Beitzel F, Stupka N & Lynch GS. 2005. B<sub>2</sub>-Agonist administration increases sarcoplasmic reticulum Ca<sup>2+</sup>-ATPase activity in aged rat skeletal muscle. *American Journal of Physiology - Endocrinology and Metabolism*. **288**(3):E526-E533.

Starkie RL, Hargreaves IM, Rolland J & Febbraio MA. 2005. Heat stress, cytokines, and the immune response to exercise. *Brain, Behavior, and Immunity*. **19**(5):404-412.

Swarbrick JD, Buyya S, Gunawardana D, Fletcher JI, Branson KM, Smith B, Pepe S, McLennan AG, Gayler KR & Gooley PR. 2005. <sup>1</sup>H, <sup>13</sup>C and <sup>15</sup>N resonance assignments of the 17kDa Ap4A hydrolase from Homo sapiens in the presence and absence of ATP. *Journal of Biomolecular NMR*. **31**(2):181-182.

Wlodek ME, Westcott KT, O'Dowd R, Serruto A, Wassef L, Moritz KM & Moseley JM. 2005. Uteroplacental restriction in the rat impairs fetal growth in association with alterations in placental growth factors including PTHrP. *American Journal of Physiology - Regulatory Integrative Comparative Physiology*. **288**:R1620-R1627.

### **C3 - Unrefereed Letters or Notes**

Kelly DJ, Wilkinson-Berka JLA & Gilbert RE. 2005. Renin Inhibition New Potential for an Old Therapeutic Target. *Hypertension*. **46**:471-472.

Risbridger GP, Drummond AE & Wlodek ME. 2005. Reproduction, development, and the early origins of adult disease. *Cell and Tissue Research*. **322**(1):3.

Scurrah KJ, Gurrin LC, Palmer L & Burton PR. 2005. Estimation of genetic and environmental factors for binary traits using family data. *Statistics in Medicine*. **24**(10):1613-1617.

### **C5 - Other Refereed Contributions to Refereed Journals**

Fletcher EL, Phipps JA & Wilkinson-Berka JLA. 2005. Dysfunction of retinal neurons and glia during diabetes. *Clinical and Experimental Optometry*. **88**(3):132-145.

### **Q9 - Substantial Grants Received**

Allen AM & Thomas W. 2005. *Modulation of blood pressure in hypertensive rats through interruption of angiotensin receptor signalling in the rostral ventrolateral medulla*. NHF, Project.

Harrap SB, Di Nicolantonio R, Jennings GLR & Thomas W. 2005. *Angiotensin receptor gene polymorphism and human heart size*. NHF, Grant-in-Aid.

Lynch GS. 2005. *Targeting calcineurin for improving muscle regeneration in skeletal muscle disease*. NH&MRC, Project.

McKinley M, Allen AM & Oldfield BJ. 2005. *Brain angiotensin: generation, localisation and physiological function*. NH&MRC, Project Grant.

Oldfield BJ & Allen AM. 2005. *The role of brain neurochemicals in the control of body weight*. NH&MRC, Project Grant.

Wlodek ME, Owens J & Cooney G. 2005. *Identification of genes involved in altered glucose metabolism and adiposity in the adult following perinatal growth restriction*. Diabetes Australia Research Trust, Project.

Wong ZYH & Harrap SB. 2005. *Identification of DNA variation on chromosome 16p12 responsible for the control of blood pressure*. NHF, Grant-in-Aid.

## **R11 - Thesis Passed for Higher Degrees**

Danes VR. 2005. *Cardiomyocyte calcium and pH regulation in primary cardiac hypertrophy.*

Sarlos S. 2005. *Involvement of the renin-angiotensin system and related growth factors in angiogenesis: studies in developing retina and ischaemic ocular pathologies.*

## **R12 - Thesis in Progress for Higher Degrees**

Adams BE. 2005. *Thalamocortical neural network activity in animal models of genetic and acquired epilepsy.*

Beitzel F. 2005. *The role of B-adrenergic signalling in skeletal muscle repair after surgery.*

Busst CJ. 2005. *The genetic basis of blood pressure and related cardiovascular risk.*

Chambers JD. 2005. *Functional activity patterns in the enteric nervous system.*

Domenighetti AAM. 2005. *Characterization of mechanisms of myocardial remodelling in genetic models of cardiac hypertrophy.*

Hales CG. 2005. *A mathematical model of the intestinal primary afferent neuron of the guineapig ileum.*

Harcourt LJ. 2005. *Assessing the effectiveness of various pharmacological therapies for treating muscular dystrophy.*

Huggins CE. 2005. *does dietary omega-3 fat supplementation protect genetically enlarged hearts against ischemic injury?*

Linden KC. 2005. *Examination of factors regulating skeletal muscle glucose uptake during exercise.*

Monif M. 2005. *Development of calcium biosensors to investigate neuronal communications.*

O'Dowd RA. 2005. *The effect of uteroplacental restriction on mammary development and lactation.*

Ong LGT. 2005. *Structural and functional studies in a transgenic rat model of diabetic retinopathy.*

Phillips MN. 2005. *Physiological demands of Australian volunteer firefighters during bush-fire suppression.*

Ping SE. 2005. *Oestrogen: a trophic factor in cholinergic basal forebrain neurons in estropausal dark agouti rats.*

Porrello ER. 2005. *Angiotensin II and cardiac growth responses.*

Ryall JG. 2005. *Age-related changes in skeletal and cardiac muscle structure and function: effects of beta 2-adrenoceptor agonist administration.*

Schertzer JD. 2005. *Skeletal and cardiac muscle pathology: From molecule to function.*

Sevigny CP. 2005. *C1 bulbospinal neurons transport, store and release specific neurotransmitters independently at separate terminals.*

Stupka N. 2005. *The calcineurin signal transduction pathway in muscular dystrophy and skeletal muscle regeneration.*

Vodstrcil LA. 2005. *Restricted placental function: the impact on relaxin physiology in pregnancy.*

Zentner D. 2005. *Longitudinal studies of cardiac and haemodynamic physiology in relation to female sex hormones.*