

Application sub-categories:

- Tumour / Cancer
- Cerebral / Stroke / MCAO
- Vital Organs / Shock
- Plastic Surgery / Wound Healing
- Physiology / Ischemia
- Methodology / Validation

Tumour / Cancer

Williams LJ, Mukherjee D, Fisher M, Reyes-Aldasoro CC, Akerman S, Kanthou C and Tozer GM (2014). An in vivo role for Rho kinase activation in the tumour vascular disrupting activity of combretastatin A-4 3-O-phosphate. *Br J Pharmacol*. 2014 Jun 16. doi: 10.1111/bph.12817. [Epub ahead of print]

Sen A, Capitano ML, Sperryak JA, Schueckler JT, Thomas S, Singh AK, Evans SS, Hylander BL and Repasky EA (2011). Mild elevation of body temperature reduces tumor interstitial fluid pressure and hypoxia and enhances efficacy of radiotherapy in murine tumor models. *Cancer Res* 71(11), 3872-80

Sersa G, Jarm T, Kotnik T, Coer A, Podkrajsek M, Sentjurc M, Miklavcic D, Kadivec M, Kranjc S, Secerov A and Cemazar M (2008). Vascular disrupting action of electroporation and electrochemotherapy with bleomycin in murine sarcoma. *Br J Cancer* 98, 388-98

Cemazar M, Wilson I, Prise VE, Bell KM, Hill SA and Tozer GM (2005). The endothelin B (ETB) receptor agonist IRL 1620 is highly vasoconstrictive in two syngeneic rat tumour lines: potential for selective tumour blood flow modification. *British Journal of Cancer* 9, 98-106

Nikfarjam M, Muralidharan V, Malcontenti-Wilson C and Christophi C (2005). Progressive microvascular injury in liver and colorectal liver metastases following laser induced focal hyperthermia therapy. *Lasers Surg Med* 37, 64-73

Daruwalla J, Nikfarjam M, Malcontenti-Wilson C, Muralidharan V and Christophi C (2005). Effect of thalidomide on colorectal cancer liver metastases in CBA mice. *J Surg Oncol* 91, 134-40

Cárdenas-Navia LI, Daohai Yu D, Braun RD, Brizel DM, Secomb TW and Dewhirst MW (2004). Tumor-dependent kinetics of partial pressure of oxygen fluctuations during air and oxygen breathing. *Cancer Research* 64, 6010-6017

Sibtain A, Hill SA, Goodchild K, Shan N, Saunders M and Hoskin PJ (2002). The modification of human tumour blood flow using pentoxifylline, nicotinamide and carbogen. *Radiotherapy and Oncology* 62, 69

Thews O, Hummel M, Kelleher DK, Lecher B and Vaupel P (2002). Nifedipine improves blood flow and oxygen supply, but not steady-state oxygenation of tumours in perfusion pressure-controlled isolated limb perfusion. *British Journal of Cancer* 87, 1462-1469

Thews O, Kelleher DK and Vaupel P (2002). Dynamics of tumor oxygenation and red blood cell flux in response to inspiratory hyperoxia combined with different levels of inspiratory hypercapnia. *Radiotherapy and Oncology* 62(1), 77-85

Thews O, Kelleher DK and Vaupel P (2001). No improvement in perfusion and oxygenation of experimental tumours upon application of vasodilator drugs. *Int J Oncol* 19, 1243-1247

Braun RD, Lanzen JL and Dewhirst MW (1999). Fourier analysis of fluctuations of oxygen tension and blood flow in R3230Ac tumors and muscle in rats. *Am J Physiol* 277, H551-558

Powell MEB, Hill SA, Saunders MI, Hoskin PJ and Chaplin DJ (1997). Human tumour blood flow is enhanced by nicotinamide and carbogen breathing. *Cancer Research* 57, 5261-5264

Hahn JS, Braun RD, Dewhirst MW, Shan S, Snyder SA, Taube JM, Ong ET, Rosner GL, Dodge RK, Bonaventura J, Bonaventura C, DeAngelo J and Meyer RE (1997). Stroma-free human hemoglobin A decreases R3230Ac rat mammary adenocarcinoma blood flow and oxygen partial pressure. *Radiation Research* 147, 185-194

Pigott KH, Hill SA, Chaplin DJ and Saunders MI (1996). Microregional fluctuations in perfusion within human tumours detected using laser Doppler flowmetry. *Radiotherapy and Oncology* 40, 45-50

Powell MEB, Hill SA, Saunders MI, Hoskin PJ and Chaplin DJ (1996). Effect of carbogen breathing on tumour microregional blood flow in humans. *Radiotherapy and Oncology* 41(3), 225-231

Hill SA and Chaplin DJ (1996). Detection of microregional fluctuations in erythrocyte flow using laser Doppler microprobes. *Oxygen Transport to Tissue XVII*, 48, 367-371

Cerebral / Stroke / MCAO

Saleh TM, Saleh MC, Connell BJ, Kucukkaya I and Abd-El-Aziz AS (2017). A novel synthetic chemical entity (UPEI-800) is neuroprotective in vitro and in an in vivo rat model of oxidative stress. *Clin Exp Pharmacol Physiol* 44(10), 993-1000

Saleh TM, Saleh MC, Connell BJ and Song YH (2017). A co-drug conjugate of naringenin and lipoic acid mediates neuroprotection in a rat model of oxidative stress. *Clin Exp Pharmacol Physiol* 44(10), 1008-1016

Nakamura S, Walker DW and Wong FY (2017). Cerebral haemodynamic response to somatosensory stimulation in near-term fetal sheep. *J Physiol* 595(4), 1289-1303

Schleicher N, Tomkins AJ, Kampschulte M, Hyvelin JM, Botteron C, Juenemann M, Yeniguen M, Krombach GA, Kaps M, Spratt NJ, Gerriets T and Nedelmann M (2016). Sonothrombolysis with BR38 Microbubbles Improves Microvascular Patency in a Rat Model of Stroke. *PLoS One* 11(4):e0152898

Arpacı H, Çomu FM, Küküç A, Kösem B, Kartal S, Şivgin V, Turgut HC, Aydın ME, Koç DS, Arslan M (2016). Effects of lornoxicam and intravenous ibuprofen on erythrocyte deformability and hepatic and renal blood flow in rats. *Drug Des Devel Ther* 10, 2477-81

Huang C, Wang LC, Wang HK, Pan CH, Cheng YY, Shan YS, Chio CC and Tsai KJ (2015). Memantine alleviates brain injury and neurobehavioral deficits after experimental subarachnoid hemorrhage. *Mol Neurobiol* 51(3), 1038-52

Manto M, Honnorat J, Hampe CS, Guerra-Narbona R, López-Ramos JC, Delgado-García JM, Saitow F, Suzuki H, Yanagawa Y, Mizusawa H and Mitoma H (2015). Disease-specific monoclonal antibodies targeting glutamate decarboxylase impair GABAergic neurotransmission and affect motor learning and behavioral functions. *Front Behav Neurosci* 9, 78

Gulec Suyen G, Isbil-Buyukcoskun N, Cam B and Ozluik K (2015). Effects of centrally injected glucagon-like peptide-2 on gastric mucosal blood flow in rats: possible mechanisms. *Peptides* 6, :62-6

Chen CC, Chang MW, Chang CP, Chang WY, Chang SC, Lin MT and Yang CL (2015). Improved infrared-sensing running wheel systems with an effective exercise activity indicator. *PLoS One* 10(4):e0122394

Kawabori M, Kacimi R, Kauppinen T, Calosing C, Kim JY, Hsieh CL, Nakamura MC and Yenari MA (2015). Triggering receptor expressed on myeloid cells 2 (TREM2) deficiency attenuates phagocytic activities of microglia and exacerbates ischemic damage in experimental stroke. *J Neurosci* 35(8), 3384-96

Huang CY, Wang LC, Wang HK, Pan CH, Cheng YY, Shan YS, Chio CC, Tsai KJ (2015). Memantine Alleviates Brain Injury and Neurobehavioral Deficits after Experimental Subarachnoid Hemorrhage. *Mol Neurobiol* 51(3):1038-52

Saleh MC, Connell BJ, Rajagopal D, Khan BV, Abd-El-Aziz AS, Kucukkaya I and Saleh TM (2014). Co-administration of resveratrol and lipoic acid, or their synthetic combination, enhances neuroprotection in a rat model of ischemia/reperfusion. *PLoS One* 9(1), e87865

Heikkinen R, Malm T, Heikkilä J, Muona A, Tanila H, Koistinaho M and Koistinaho J (2014). Susceptibility to focal and global brain ischemia of Alzheimer mice displaying aβ deposits: effect of immunoglobulin. *Aging Dis* 5(2), 76-87

Little AG and Seebacher F (2014). Thyroid hormone regulates cardiac performance during cold acclimation in zebrafish (*Danio rerio*). *J Exp Biol* 217(Pt 5), 718-25

Connell BJ, Saleh MC, Kucukkaya I, Abd-El-Aziz AS, Khan BV and Saleh TM (2014). UPEI-300, a conjugate of lipoic acid and edaravone, mediates neuroprotection in ischemia/reperfusion. *Neurosci Lett* 561, 151-5

Sepramaniam S, Tan JR, Tan KS, DeSilva DA, Tavintharan S, Woon FP, Wang CW, Yong FL, Karolina DS, Kaur P, Liu FJ, Lim KY, Armugam A and Jayaseelan K (2014). Circulating microRNAs as biomarkers of acute stroke. *Int J Mol Sci* 15(1), 1418-32

Zehendner CM, Wedler HE and Luhmann HJ (2013). A novel in vivo model to study pericytes in the neurovascular unit of the developing cortex. *PLoS One* 8(11), e81637

Zhu XH, Zhang Y, Wiesner HM, Ugurbil K and Chen W (2013). In vivo measurement of CBF using (17)O NMR signal of metabolically produced H(2) (17)O as a perfusion tracer. *Magn Reson Med* 70(2), 309-14

Teranishi K, Scultetus A, Haque A, Stern S, Philbin N, Rice J, Johnson T, Auker C, McCarron R, Freilich D and Arnaud F (2012). Traumatic brain injury and severe uncontrolled haemorrhage with short delay pre-hospital resuscitation in a swine model. *Injury* 43(5), 585-93

Connell BJ, Saleh MC, Khan BV, Rajagopal D and Saleh TM (2012). UPEI-100, a conjugate of lipoic acid and apocynin, mediates neuroprotection in a rat model of ischemia/reperfusion. *Am J Physiol Regul Integr Comp Physiol*. 302(7), R886-95

Liew HK, Kuo JS, Wang JY and Pang CY (2014). Granulocyte-Colony Stimulating Factor Increases Cerebral Blood Flow via a NO Surge Mediated by Akt/eNOS Pathway to Reduce Ischemic Injury. *Hindawi, The Scientific World Journal, Article ID 657932*

Liew HK, Pang CY, Hsu CW, Wang MJ, Li TY, Peng HF, Kuo JS and Wang JY (2012). Systemic administration of urocortin after intracerebral hemorrhage reduces neurological deficits and neuroinflammation in rats. *J Neuroinflammation*. 9, 13

Levi H, Schoknecht K, Prager O, Chassidim Y, Weissberg I, Serlin Y and Friedman A (2012). Stimulation of the sphenopalatine ganglion induces reperfusion and blood-brain barrier protection in the photothrombotic stroke model. *PLoS One*. 2012;7(6), e39636

Wang LC, Huang CY, Wang HK, Wu MH and Tsai KJ (2012). Magnesium sulfate and nimesulide have synergistic effects on rescuing brain damage after transient focal ischemia. *J Neurotrauma* 29(7), 1518-29

Connell BJ, Khan BV, Rajagopal D, and Saleh MT (2012). Novel Neurovascular Protective Agents: Effects of INV-155, INV-157, and INV-161 versus Lipoic Acid and Captopril in a Rat Stroke Model. *Cardiology Research and Practice, Volume 2012, Article ID 319230, 6 pages, doi:10.1155/2012/319230*

Marbacher S, Anderegg L, Neuschmelting V, Widmer HR, von Gunten M, Takala J, Jakob SM and Fandino J (2012). A new rabbit model for the study of early brain injury after subarachnoid hemorrhage. *J Neurosci Methods* 208(2), 138-45

Connell BJ and Saleh TM (2012). Co-administration of apocynin with lipoic acid enhances neuroprotection in a rat model of ischemia/reperfusion. *Neurosci Lett* 507(1), 43-6

Mishra AM, Ellens DJ, Schridde U, Motelow JE, Purcaro MJ, DeSalvo MN, Enev M, Sanganahalli BG, Hyder F and Blumenfeld H (2011). Where fMRI and electrophysiology agree to disagree: corticothalamic and striatal activity patterns in the WAG/Rij rat. *J Neurosci* 31(42), 15053-64

Liu X, Zhu XH, Zhang Y and Chen W (2011). Neural origin of spontaneous hemodynamic fluctuations in rats under burst-suppression anesthesia condition. *Cereb Cortex* 21(2), 374-84

Lin YC, Ko TL, Shih YH, Lin MY, Fu TW, Hsiao HS, Hsu JY and Fu YS (2011). Human umbilical mesenchymal stem cells promote recovery after ischemic stroke. *Stroke* 42(7), 2045-53

Greco R, Meazza C, Mangione AS, Allena M, Bolla M, Amantea D, Mizoguchi H, Sandrini G, Nappi G and Tassorelli C (2011). Temporal profile of vascular changes induced by systemic nitroglycerin in the meningeal and cortical districts. *Cephalalgia* 31(2), 190-8

Strbian D, Durukan A, Pitkonen M, Marinkovic I, Tatlisumak E, Pedrono E, Abo-Ramadan U and Tatlisumak T (2008). The blood-brain barrier is continuously open for several weeks following transient focal cerebral ischemia. *Neuroscience* 153, 175-181

Hsiao G, Lee J-J, Chen Y-C, Lin J-H, Shen M-Y, Lin K-H, Chou D-S and Sheu J-R (2007). Neuroprotective effects of PMC, a potent α-tocopherol derivative, in brain ischemia-reperfusion: reduced neutrophil activation and anti-oxidant actions. *Biochemical Pharmacology* 73, 682-693

Verberne AJM and McInerney K (2006). Pancreatic vasoconstrictor responses are regulated by neurons in the rostral ventrolateral medulla. *Brain Res* 1102, 127-134

Hsiao G, Chen Y-G, Lin J-H, Lin K-H, Chou D-S, Lin C-H and Sheu J-R (2006). Inhibitory mechanisms of tetramethylpyrazine in middle cerebral artery occlusion (MCAO)-induced focal cerebral ischemia in rats. *Pharmacology Planta Med* 72, 411-417

Strbian D, Karjalainen-Lindsberg M-L, Tatlisumak T and Lindsberg PJ (2006). Cerebral mast cells regulate early ischemic brain swelling and neutrophil accumulation. *J Cereb Blood Flow Metab*. 26, 605-12

Nurmi A, Vartiainen N, Pihlaja R, Golsteins G, Yrjanheikki J and Koistinaho J (2004). Pyrrolidine dithiocarbamate inhibits translocation of nuclear factor kappa-B in neurons and protects against brain ischaemia with a wide therapeutic time window. *J Neurochem* 91, 755-65

Nersesyan H, Herman P, Erdogan E, Hyder F and Blumenfeld H (2004). Relative changes in cerebral blood flow and neuronal activity in local microdomains during generalized seizures. *J Cereb Blood Flow Metab* 24, 1057-1068

- Kannurpatti SS and Biswal BB** (2004). Effect of anesthesia on CBF, MAP and fMRI-BOLD signal in response to apnea. *Brain Research* 1011, 141-147
- Kannurpatti SS, Biswal BB and Hudetz AG** (2003). Map-induced effects in CBF and BOLD signal response to apnea in anesthetized rats. *Proc Intl Soc Mag Reson Med* 11, 1774
- Kannurpatti SS, Biswal BB and Hudetz AG** (2003). Baseline physiological state and the fMRI-BOLD signal response to apnea in anesthetized rats. *NMR in Biomedicine* 16, 261–268
- Kannurpatti SS, Biswal BB and Hudetz AG** (2002). Differential fMRI-BOLD signal response to apnea in humans and anesthetized rats. *Magnetic Resonance in Medicine* 47, 864-870
- Blood AB, Hunter CJ and Power GG** (2002). The role of adenosine in regulation of cerebral blood flow during hypoxia in the near-term fetal sheep. *J Physiol* 543, 1015-23
- Shen H, Greene AS, Stein EA and Hudetz AG** (2002). Functional cerebral hyperemia is unaffected by isovolemic hemodilution. *Anesthesiology* 96, 142-147
- Kannurpatti SS, Biswal BB and Hudetz AG** (2002). Differential fMRI-BOLD signal response to apnea in humans and anesthetized rats. *Magnetic Resonance in Medicine* 47, 864-870
- Lauer KK, Shen H, Stein EA, Ho K-C, Kampine JP and Hudetz AG** (2002). Focal cerebral ischemia in rats produced by intracarotid embolization with viscous silicone. *Neuro Res* 24, 181-190
- Koistinaho, M, Kettunen MI, Holtzman DM, Kauppinen RA, Higgins LS and Koistinaho J** (2002). Expression of Human Apolipoprotein E downregulates amyloid precursor protein – induced ischemic susceptibility. *Stroke* 33, 1905-1910
- Koistinaho, M, Kettunen MI, Goldsteins G, Keinänen R, Salminen A, Ort M, Bures J, Liu D, Kauppinen RA, Higgins LS and Koistinaho J** (2002). β -Amyloid precursor protein transgenic mice that harbor diffuse A β deposits but do not form plaques show increased ischemic vulnerability: Role of inflammation. *PNAS* 99, 1610-1615
- Schmidt-Kastner R, Truettner J, Lin B, Zhao W, Saul I, Busto R and Ginsberg M D** (2001). Transient changes of brain-derived neurotrophic factor (BDNF) mRNA expression in hippocampus during moderate ischemia induced by chronic bilateral common carotid artery occlusion in the rat. *Molecular Brain Research* 92, 157-166
- Lan J, Hunter CJ, Murata T and Power GG** (2000). Adaptation of laser-Doppler flowmetry to measure cerebral blood flow in the fetal sheep. *Appl Physiol* 89, 1065-1071
- Alonso-Balincia M, Hudetz AG, Shen H, Harder DR and Roman RJ** (1999). Contribution of 20-HETE to vasodilator actions of nitric oxide in the cerebral microcirculation. *Stroke* 30, 2727-34
- Lauer KK, Shen H, Hudetz AG, Stein EA and Kampine JP** (1998). Regional cerebral blood flow autoregulation in a silicone embolus model of focal brain ischemia as assessed by multichannel laser Doppler flowmetry. *Adv Exp Med Biol* 454, 253-9
- Hudetz AG, Shen H and Kampine JP** (1998). Nitric oxide from neuronal NOS plays critical role in cerebral capillary flow response to hypoxia. *Am J Physiol* 274, H982-9
- Soriano MA, Sanz O, Ferrer I and Planas AM** (1997). Cortical infarct volume is dependent on the ischemic reduction of perifocal cerebral blood flow in a three-vessel intraluminal MCA occlusion/reperfusion model in the rat. *Brain Research* 747(2), 273-278
- Hudetz AG, Biswal BB, Feher G and Kampine JP** (1997). Effects of hypoxia and hypercapnia on capillary flow velocity in the rat cerebral cortex. *Microvascular Research* 54, 35-42
- Vital Organs / Shock**
- Ahmad A, Daneva Z, Li G, Dempsey SK, Li N, Poklis J, Lichtman A, Li PL and Ritter JK** (2017). Stimulation of diuresis and natriuresis by renomedullary infusion of a dual inhibitor of fatty acid amide hydrolase and monoacylglycerol lipase. *Am J Physiol Renal Physiol*. 2017 Aug 2;ajprenal.00196.2017. doi: 10.1152/ajprenal.00196.2017. [Epub ahead of print]
- Ganesh T, Estrada M, Yeger H, Duffin J and Cheng HM** (2017). A non-invasive magnetic resonance imaging approach for assessment of real-time microcirculation dynamics. *Sci Rep* 7(1), 7468
- Post EH, Su F, Hosokawa K, Taccone FS, Herpain A, Creteur J, De Backer D and Vincent JL** (2017). The effects of acute renal denervation on kidney perfusion and metabolism in experimental septic shock. *BMC Nephrol* 18(1), 182
- Post EH, Su F, Hosokawa K, Taccone FS, Herpain A, Creteur J, Vincent JL and De Backer D** (2017). Changes in kidney perfusion and renal cortex metabolism in septic shock: an experimental study. *J Surg Res* 207, 145-154
- Gulec SG, Isbil-Buyukcoskun N, Cam B and Ozluk K** (2015). Effects of centrally injected glucagon-like peptide-2 on gastric mucosal blood flow in rats: possible mechanisms. *Peptides* 64, 62-6
- Dong B, Zhou H, Han C, Yao J, Xu L, Zhang M, Fu Y and Xia Q** (2014). Ischemia/reperfusion-induced CHOP expression promotes apoptosis and impairs renal function recovery: the role of acidosis and LPR4. *PLoS One*, 9(10), e110944
- Brügger L, Beldi G, Stalder M, Porta F, Candinas D, Takala J and Jakob SM** (2012). Postoperative splanchnic blood flow redistribution in response to fluid challenges in the presence and absence of endotoxemia in a porcine model. *Shock* 37(1), 116-121
- Güven S, Muci E, Unsal MA, Yulug E, Alver A, Duman MK and Mentese A** (2010). The effects of carbon dioxide pneumoperitoneum on ovarian blood flow, oxidative stress markers, and morphology during laparoscopy: a rabbit model. *Fertil Steril* 93(4), 1327-32
- Cai RS, Alexander MS, Marson L** (2008). Activation of somatosensory afferents elicit changes in vaginal blood flow and the urethro-genital reflex via autonomic efferents. *J Urol* 180, 1167-72
- Deniz T, Agalar C, Ozdogan M, Comu F, Emirdogan M, Taskin S, Saygun O and Agalar F** (2007). Oral carbohydrate solution ameliorates endotoxemia-induced splanchnic ischemia. *Dig Dis Sci* 52, 287-91
- Krejci V, Hildebrand LB and Sigurdsson GH** (2006). Effects of epinephrine, norepinephrine, and phenylephrine on microcirculatory blood flow in the gastrointestinal tract in sepsis. *Critical Care Medicine* 34, 1456-146.
- Hildebrand LB, Krejci V and Sigurdsson GH** (2004). Effects of dopamine, dobutamine, and dopexamine on microcirculatory blood flow in the gastrointestinal tract during sepsis and anesthesia. *Anesthesiology* 100, 1188-1197
- Calatayud S, Canet A, Bello R, Hernández C, Martí M and Barrachina MD** (2003). Low endotoxemia prevents the reduction of gastric blood flow induced by NSAIDs: role of nitric oxide. *British Journal of Pharmacology* 139, 263–270
- Morales J, Moitinho E, Abraides JG, Fernández M and Bosch J** (2003). Effects of the V1a vasopressin agonist F-180 on portal hypertension-related bleeding in portal hypertensive rats. *Hepatology* 38, 1378–1383
- Hildebrand LB, Krejci V, tenHoevel ME, Banic A and Sigurdsson GH** (2003). Redistribution of microcirculatory blood flow within the intestinal wall during sepsis and general anesthesia. *Anesthesiology* 98, 658-69
- Krejci V, Hildebrand LB, Erni D and Sigurdsson GH** (2003). Endothelin receptor antagonist bosentan improves microcirculatory blood flow in splanchnic organs in septic shock. *Critical Care Medicine* 31, 203-10
- Hildebrand U, Kobelt V, vOphoven M, Suwelack B, Matzkies F, Gerhardt U, Sindermann J and Hohage H** (2002). Influence of antihypertensive drugs on renal microcirculation and renal hemodynamics in cyclosporine a-treated rats. *Transplantation Proceedings* 34, 1383-1384
- Castañeda B, Morales J, Lionetti R, Moitinho E, Andreu V, Pérez-del-Pulgar S, Pizcueta P, Rodés J and Bosch J** (2001). Effects of blood volume restitution following a portal hypertensive-related bleeding in anesthetized cirrhotic rats. *Hepatology* 33(4), 821-825
- Krejci V, Hildebrand L, Banic A, Erni D, Wheatley AM and Sigurdsson GH** (2000). Continuous measurements of microcirculatory blood flow in gastrointestinal organs during acute haemorrhage. *Br J Anaesth* 84, 468-475
- Cortijo J, Pons R, Dasí F, Marín N, Martínez-Losa M, Advenier C and Morcillo EJ** (1997). Bronchodilator and anti-inflammatory activities of SCA40: studies in human isolated bronchus, human eosinophils, and in the guinea-pig in vivo. *Naunyn-Schmiedeberg's Archives of Pharmacology* 35, 806-814
- Plastic Surgery / Wound Healing**
- C Bagdas D, Cam Etoz B, Inan Ozturkoglu S, Cinkilic N, Ozyigit MO, Gul Z, Isbil Buyukcoskun N, Ozluk K and Gurun MS** (2014). Effects of systemic chlorogenic acid on random-pattern dorsal skin flap survival in diabetic rats. *Biol Pharm Bull* 37(3), 361-70
- Contaldo C, Harder Y, Plock J, Banic A, Jakob S and Erni D** (2007). The influence of local and systemic preconditioning on oxygenation, metabolism and survival in critically ischaemic skin flaps in pigs. *Journal of Plastic, Reconstructive & Aesthetic Surgery* 60, 1182-1192
- Harder Y, Contaldo C, Klenk J, Banic A, Jakob SM and Erni D** (2005). Preconditioning with monophosphoryl lipid A improves survival of critically ischemic tissue. *Anesth Analg* 100, 1786-1792
- Rodrigues LM, Pinto PC, Magro MJ and Alves MFJ** (2004). Exploring the influence of skin perfusion on transepidermal water loss. *Skin Research and Technology* 10, 257-262
- Rodrigues ML, Magro MJ, Pinto CP, Mourozinhos M and Almeida A** (2004). Non-invasive assessment of wound-healing pathophysiology by transcutaneous indicators. *Annals of Burns and Fire Disasters* 17(3)
- Peltonen LM and Pyörnilä A** (2004). Local action of exogenous nitric oxide (NO) on the skin blood flow of rock pigeons (*Columba livia*) is affected by acclimation and skin site. *Journal of Experimental Biology* 207, 2611-2619
- Rosado C and Rodrigues LM** (2003). In vivo study of the physiological impact of stratum corneum sampling methods. *International Journal of Cosmetic Science* 25, 37-44
- Schramm S, Wettstein R, Wessendorf R, Jakob SM, Banic A and Erni D** (2002). Acute normovolemic hemodilution improves oxygenation in ischemic flap tissue. *Anesthesiology* 96, 478-1484
- Erni D, Wessendorf R, Wettstein R, Banic A and Schilling MK** (2001). Endothelin receptor blockade improves oxygenation in contralateral TRAM flap tissue in pigs. *British Journal of Plastic Surgery* 54(5), 412-418
- Raisis AL, Young LE, Taylor PM, Walsh KP and Leukeu P** (2000). Doppler ultrasonography and single-fiber laser Doppler flowmetry for measurement of hind limb blood flow in anesthetized horses. *American Journal of Veterinary Research* 61(3), 286-290
- Physiology / Ischemia**
- Lai Y-H and Guo L-Y** (2015). Finite Element Analysis and Empirical Analysis of a Cost-effective Pressure Ulcer-Preventing Mattress. *Int J AUSMT* 5(4) Lai
- Zhang YT, Han MQ, Shen LN, Zhao JH and Feng NP** (2015). Solid Lipid Nanoparticles Formulated for Transdermal Aconitine Administration and Evaluated In Vitro and In Vivo. *J Biomed Nanotechnol* 11(2), 351-61
- Budgell BS, Sovak G, Soave D** (2014). TENS augments blood flow in somatotopically linked spinal cord segments and mitigates compressive ischemia. *Spinal Cord* 52(10), 744-8
- Jiang X, Malkovskiy AV, Tian W, Sung YK, Sun W, Hsu JL, Manickam S, Wagh D, Joubert LM, Semenza GL, Rajadas J and Nicolls MR** (2014). Promotion of airway anastomotic microvascular regeneration and alleviation of airway ischemia by deferoramine nanoparticles. *Biomaterials* 35(2), 803-13
- Guerci P, Tran N, Menu P, Losser MR, Meistelman C and Longrois D** (2014). Impact of fluid resuscitation with hypertonic-hydroxyethyl starch versus lactated ringer on hemorrhage and microcirculation in hemorrhagic shock. *Clin Hemorheol Microcirc* 56(4), 301-17
- He K, Chen X, Han C, Xu L, Zhang J, Zhang M and Xia Q** (2014). Lipopolysaccharide-induced cross-tolerance against renal ischemia-reperfusion injury is mediated by hypoxia-inducible factor-2 α -regulated nitric oxide production. *Kidney Int* 85(2), 276-88
- Chang HH, Lee YC, Chen MF, Kuo JS and Lee TJ** (2012). Sympathetic activation increases basilar arterial blood flow in normotensive but not hypertensive rats. *Am J Physiol Heart Circ Physiol*. 302(5), H1123-30
- El Beheiry MH, Heximer SP, Voigtlaender-Bolz J, Mazer CD, Connelly KA, Wilson DF, Beattie WS, Tsui AK, Zhang H, Golam K, Hu T, Liu E, Lidington D, Bolz SS and Hare GM** (2011). Metoprolol impairs resistance artery function in mice. *J Appl Physiol* 111(4), 1125-33
- Isbil-Buyukcoskun N, Gulec G, Cam-Etoz B and Ozluk K** (2009). Peripheral GLP-1 gastroprotection against ethanol: The role of endoxin, NO, CGRP, prostaglandins and blood flow. *Regul Pept* 152, 22-27
- Murnaghan M, Li G and Marsh DR** (2006). Nonsteroidal anti-inflammatory drug-induced fracture nonunion: an inhibition of angiogenesis? *J Bone Joint Surg Am* 88 Suppl 3, 140-47
- Mäkinen TM, Pääkkönen T, Palinkas LA, Rintamäki H, Leppäluoto J and Hassi J** (2004). Seasonal changes in thermal responses of urban residents to cold exposure. *Comp Biochem Physiol A Mol Integr Physiol*. 139, 29-238
- Omar AA, Mavor AID, Jones AM and Homer-Vanniasinkam S** (2004). Treatment of venous leg ulcers with Dermagraft®. *European Journal of Vascular and Endovascular Surgery*, 27, 666-672
- Giuliano F, Allard J, Compagnie S, Alexandre L, Droupy S and Bernabe J** (2001). Vaginal physiological changes in a model of sexual arousal in anesthetized rats. *Am J Physiol Regul Integr Comp Physiol* 281, R140-149
- Nazzaro P, Triggiani R, Ciancio L, Scarano AM, Merlo M, Manzari M, Cicco G, Manicone A and Pirelli A** (1999). Microvascular changes during laboratory stimuli and structural haemodynamic indices: the role of pulse pressure. *Clinical Hemorheology and Microcirculation* 21, 225-232
- Calatayud S, Sanz M-J, Canet A, Bello R, Diaz de Rojas F and Esplugues JV** (1999). Mechanisms of gastroprotection by transdermal nitroglycerin in the rat. *British Journal of Pharmacology* 127, 1111–1118
- Darlington SE, Carlolan-Rees G, Davies WT, Griffiths H and Woodcock JP** (1998). Use of a multi-channel laser Doppler flowmeter in the objective assessment of hand-arm vibration syndrome patients. *Journal of Vascular Investigation* 4, 31-34.
- Khattab M, Hohage H, Hollah P, Rahn K-H and Schlatter E** (1998). Effects of diadenosine polyphosphates on systemic and regional hemodynamics in anesthetized rats. *Kidney & Blood Pressure Research* 21, 42-49

- Kuznetsova LV, Tomasek N, Sigurdsson GH, Banic A, Erni D and Wheatley AM** (1998). Dissociation between volume blood flow and laser-Doppler signal from rat muscle during changes in vascular tone. *Physiol Heart Circ Physiol* 274 (4), H1248-H1254
- Magerl W and Treede R-D** (1996). Heat-evoked vasodilatation in human hairy skin: axon reflexes due to low-level activity of nociceptive afferents. *Journal of Physiology* 497, 837-848

Methodology / Validation

- Zhang YT, Han MQ, Shen LN, Zhao JH and Feng NP** (2015). Solid Lipid Nanoparticles Formulated for Transdermal Aconitine Administration and Evaluated In Vitro and In Vivo. *J Biomed Nanotechnol* 11(2), 351-61
- Laurens E, Yeoh SD, Rigopoulos A, Cao D, Cartwright GA, O'Keefe GJ, Tochon-Danguy HJ, White JM, Scott AM and Ackermann U** (2014). Radiolabelling and evaluation of a novel sulfoxide as a PET imaging agent for tumor hypoxia. *Nucl Med Biol* 41(5), 419-25
- Swartz HM, Williams BB, Zaki BI, Hartford AC, Jarvis LA, Chen EY, Comi RJ, Ernstoff MS, Hou H, Khan N, Swarts SG, Flood AB and Kuppusamy P** (2014). Clinical EPR: unique opportunities and some challenges. *Acad Radiol* 21(2), 197-206
- Fredriksson I, Fors C and Johansson J** (2007). "Laser Doppler Flowmetry - a Theoretical Framework", *Department of Biomedical Engineering, Linköping University (2007)*, www.imt.liu.se/bit/ldf/ldfmain.html
- Maniewski R, Liebert A, Kacprzak M and Zbiec A** (2004). Selected applications of near infrared optical methods in medical diagnosis. *Opto-Electron. Rev* 12(3).
- Bishai JM, Blood AB, Hunter CJ, Longo LD and Power GG** (2003). Fetal lamb cerebral blood flow (CBF), and oxygen tensions during hypoxia: a comparison of laser Doppler and microsphere measurements of CBF. *J Physiol (Lond)*. 546, 869-878
- Rees GC, Tweddel AC, Naka KK and Griffith TM** (2002). Fractal dimensions of laser Doppler flowmetry time series. *Medical Engineering & Physics* 24, 71
- Maniewski R, Leger P, Lewandowski P, Liebert A, Bendayan P, Boccalon H, Bajorski L and Möller KO** (1999). Spectral analysis of laser-Doppler perfusion signal measured during thermal test. *Technology and Health Care* 7, 163-169
- Leahy MJ, de Mul FFM, Nilsson GE and Maniewski R** (1999). Principles and practice of the laser-Doppler perfusion technique. *Technology and Health Care* 7, 143-162
- Liebert A, Leahy M and Maniewski R** (1998). Multichannel laser-Doppler probe for blood perfusion measurements with depth discrimination. *Medical and Biological Engineering and Computing* 36, 740-747
- Hill SA, Pigott KH, Saunders MI, Powell MEB, Arnold S, Obeid A, Ward G, Leahy M, Hoskin PJ and Chaplin DJ** (1996). Microregional blood flow in murine and human tumours assessed using laser Doppler microprobes. *British Journal of Cancer* 74, (Suppl, XXVII), S260-S263
- Liebert A and Maniewski R** (1996). Influence of probe optical arrangement on biological zero in laser-Doppler perfusion measurements. *This paper appears in: Engineering in Medicine and Biology Society, 1996. Bridging Disciplines for Biomedicine. Proceedings of the 18th Annual International Conference of the IEEE. Publication Date: 31 Oct-3 Nov 1996 Volume: 1, On page(s): 200-201 vol.1*