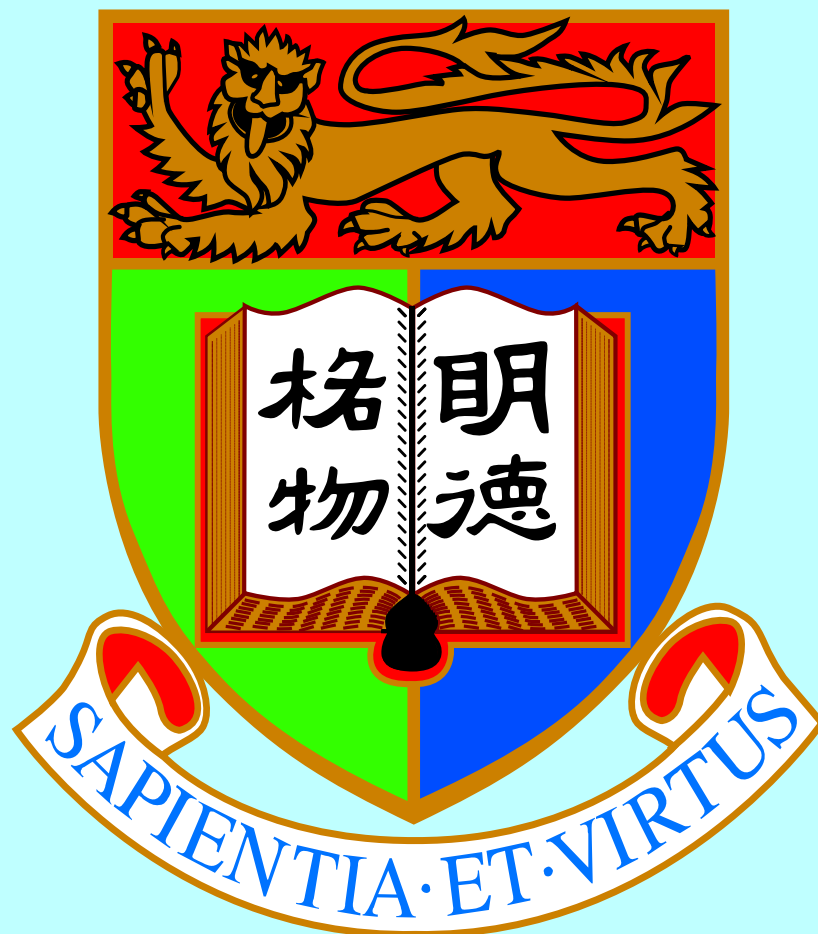


香港大學心臟血管研究所

THE INSTITUTE OF CARDIOVASCULAR
SCIENCE AND MEDICINE



2010 Annual Report

Mission Statement of the Institute of Cardiovascular Science and Medicine

The Institute of Cardiovascular Science and Medicine (ICSM) commits itself to strive for excellence in research, teaching and training in cardiovascular sciences which contributes to the prevention and patient management of cardiovascular diseases in Hong Kong.

We shall offer the highest standards of teaching research and scholarship in an interactive environment conducive to creativity, to innovative learning and to freedom of thought, enquiry and expression in all aspects of cardiovascular sciences.

We shall continue to undertake research, teaching and other forms of service in clinical and basic cardiovascular sciences which will advance our quest for wisdom, truth and excellence in biomedical science at large.

We shall make known the mission of this Institute in Hong Kong and internationally

Governance

Council

The members of the Institute elect a Council, who are responsible for carrying out the work of the Institute according to its Mission, Objectives, By-Laws and Regulations. The Council consists of the Officers, the immediate Former Director (if available), and three to ten Council Members. The Officers of the Institute are the Director, Deputy Director, Honorary Secretary and Honorary Treasurer. Each Council serves the Institute for a period of two years. The Seventh Council of the Institute was elected at the 12th Annual General Meeting on 12th December 2009, and held office throughout 2010.

Seventh Council of the ICSM

Director:	Professor P.M. Vanhoutte	Council	Professor B.M.Y Cheung
		Members:	Professor Y.F. Cheung
Deputy			Professor S.S.M. Chung
Director:	Dr. K.L.F. Lee		Dr. M.L. Fung
			Professor C.P. Lau
Honorary			Dr. G.P.H. Leung
Secretary:	Dr. H.J. Ballard		Dr. G.R. Li
			Dr. H.F. Tse
Honorary			Professor T.M. Wong
Treasurer:	Dr. S.W.S. Leung		Professor X.Q. Yao

Membership

At the end of the year 2010, membership stood at 122, and consisted of 11 Founding Members, 39 Full Members, 5 Associate members and 67 Affiliate Members.

Criteria for membership

Clinicians, scientists, researchers and students with an interest in the cardiovascular field are invited to become members of the Institute. The classes of membership open to applicants are Full, Associate or Affiliate Membership.

All applicants for admission shall

1. Be at least 18 years of age; and
2. Be of good character and repute; and
3. Undertake in writing to adhere to the By-Laws of the Institute, as amended from time to time.

Applicants for admission as a Full Member shall also

1. Be a full time or honorary teacher (Assistant Professor, Honorary Clinical Lecturer or above) of the University of Hong Kong or be deemed to be holding an equivalent position; and
2. Be engaged in research in cardiovascular science or cardiovascular medicine, as evidenced by his or her published works.

Applicants for admission as Associates shall also

1. Possess either a medical degree (MBBS or equivalent) plus a higher qualification (MRCP or equivalent), or a doctorate (PhD or equivalent) in science; and
2. Be engaged in research in cardiovascular science or cardiovascular medicine.

Applicants for admission as Affiliates shall also

1. Possess a University degree or equivalent in medicine, nursing or science; and
2. Be engaged in or have a strong interest in cardiovascular research.

Applications for membership, accompanied by the appropriate supporting documents (eg. resume, list of relevant publications, copies of certificates) should be submitted to the Honorary Secretary, to whom membership enquiries may also be addressed. The application form may be obtained by writing or e-mailing (icsm@hkucc.hku.hk) to the Honorary Secretary, or it may be downloaded from the membership section of our website (<http://www.icsm-hk.org>)

Research

Scientific Meetings

The Fourteenth Annual Scientific Meeting: New Advances in Cardiovascular Therapy

The Fourteenth Annual Scientific Meeting was held on December 18th 2010 at the Hong Kong Convention & Exhibition Centre, under the Co-Chairmanship of Professor Paul Vanhoutte, Professor Bernard Cheung and Dr. Kathy Lee.

The meeting started in the morning with oral and poster presentations by the young investigators: 40 abstracts were submitted for the meeting, and prizes were awarded to the best oral communications and the best poster presentations. The Young Investigator Awards were sponsored by the Sun Chieh Yeh Heart Foundation.

A highly interesting symposium on the topic “New therapy to prevent coronary thrombosis” took place over lunch, thanks to Professor CM Yu from the Chinese University of Hong Kong and Professor Bernard Cheung from the University of Hong Kong.

The afternoon was devoted to a series of clinically-focussed invited lectures, given by a distinguished panel of overseas and local speakers. Topics in the first afternoon symposium included “Biological pacing: promises and challenges”, presented by Professor Mike Rosen from the University of Columbia, New York, and “Cardiac resynchronization therapy” delivered by Professor CM Yu from the Chinese University of Hong Kong.

In the second afternoon symposium, Professor CQ Jiang from Guangzhou No. 12 Hospital presented findings from the Guangzhou Biobank Cohort Study, and Professor Bernard Cheung from the University of Hong Kong presented new findings from the Hong Kong Cardiovascular Risk Factor Prevalence Study.

These were followed by talks from Dr C. Chan from Queen Mary Hospital on “State of the art imaging of coronary arteries” and Dr. David Siu from the University of Hong Kong on “Implantable cardioverter defibrillator – who should have it?”.

The meeting closed with a brief address from ICSM Director, Professor Paul Vanhoutte, and the presentation ceremony for the Young Investigator Awards.

External Research Grants awarded in 2010 to members of the ICSM

Principal / Co- Investigator	Awarding Body	Project Title	Award
Y.F. Cheung (PI)	RGC GRF	Mechanics of Ventricular-Ventricular Interaction in Patients After Tetralogy of Fallot Repair: Analysis by Three-dimensional Speckle Tracking Echocardiography.	HK\$ 566,950
Y.F. Cheung (PI)	Children Thalassaemia Foundation	Induction of endothelial microparticle generation by plasma of beta-thalassaemia major patients: effect of chelating regimens and role of carvedilol.	HK\$ 200,000
M.L. Fung (PI)	RGC GRF	Pathophysiological roles of pro-inflammatory cytokines in the carotid body in intermittent hypoxia.	HK\$ 1,200,000
G.W. He (PI)	Ministry of Science & Technology, PRC	Research, Development, and Clinical Application of Biomarkers in Important Cardiac Diseases	
G.W. He (PI)	Ministry of Science & Technology, PRC	Studies on the Genetic Mechanism of the Development of Cardiac Septal Defects	
G.W. He (PI)	Tianjin Municipal Science and Technology Commission	Genetic (GWAS) and Related Functional Studies on Coronary Artery Disease in Chinese	
G.W. He (CI)	Tianjin Municipal Science and Technology Commission	冠脉循环中内皮 TRP 通道的作用及缺氧再灌注对其的影响	
G.W. He (CI)	Siberia National Foundation	Investigation of the Effect and Mechanism of Action of Different Vasodilator Substances on the Human Bypass Grafts	
G.P.H. Leung (PI)	RGC GRF	Protective effect of ergothioneine on endothelial cell function against oxidative stress	HK\$ 840,940

G.R. Li (PI) P.M. Vanhoutte (CI)	ITF	Studies on the Natural Anti-Atrial Fibrillation Compound Acacetin and Its Analogues/ Derivatives	HK\$ 999,240
Q. Yang (PI)	Tianjin Municipal Science and Technology Commission	Role of Coronary Endothelial TRP Channels and the Effect of Hypoxia-Reoxygenation.	RMB 100,000
X.Y. Yao (PI)	RGC GRF	Role of TRPC5-related channels in mechanosensing of aortic arch baroreceptor.	HK\$ 1,380,000

Patents awarded in 2010 to members of the ICSM

Li GR, Lau CP, Qin GW, Wang HB. Use of acacetin and related compounds as potassium channel inhibitors. *United States Patent* 7816400, Oct 19, 2010.

ICSM Publications in 2010

Abstracts from the Fourteenth Annual Scientific Meeting (held in December 2010) were published in the October 2010 issue of the Journal of the Hong Kong College of Cardiology (Volume 18, No. 2, pp. 60-81).

BMJ Cheung	CARDIOVASCULAR RISK FACTORS IN HONG KONG – AN UPDATE	62
MR Rosen	BIOLOGICAL PACING: PROMISES AND CHALLENGES	62
CF Liang, A Xu, PM Vanhoutte	RECEPTORS NITRIC OXIDE-MEDIATED RELAXATIONS IN LEPRdb/db MICE	63
EHC Tang, E Shvartz, K Shimizu, VZ Rocha, C Zheng, D Fukuda, GP Shi, G Sukhova, P Libby	DEFICIENCY OF EP4 RECEPTOR ON BONE MARROW DERIVED CELLS BOOSTED INFLAMMATION AND ABDOMINAL AORTIC ANEURYSM FORMATION INDUCED BY ANGIOTENSIN II IN HYPERLIPIDEMIC MICE	63
L Lu, GR Li, HJ Ballard	MYOBLASTS THAT MAY CONTRIBUTE TO ACIDOSIS INDUCED ATP RELEASE	64
L Liu, WT Wong, XY Tian, J Liu, CW Lau, YX Wang, G Xu, A Xu, KSL Lam, ZY Chen, X Yao, Y Huang	DIPEPTIDYL-PEPTIDASE 4 INHIBITOR IMPROVES ENDOTHELIAL FUNCTION OF SPONTANEOUSLY HYPERTENSIVE RATS THROUGH ACTIVATION OF GLP-1/ GLP-1 RECEPTOR/AMPK/NO CASCADE	64
Q Han, SC Yeung, MSM Ip, JCW Mak	INTERMITTENT HYPOXIA INDUCES PARADOXICAL CARDIO-PROTECTIVE EFFECTS IN AN ANIMAL MODEL VIA HEME OXYGENASE-1 UPREGULATION	65
W Wu, CP Lau, HF Tse, GR Li	BETA1 SUBUNIT-DEPENDENT MODULATION OF BK CHANNEL BY MEMBRANE CHOLESTEROL	65
B Yang, A Xu, PM Vanhoutte, HF Tse, Y Wang	LIPOCALIN-2 DEFICIENCY PROTECTS HEARTS AGAINST ISCHEMIA/REPERFUSION INJURY	66
Z Li, PM Vanhoutte	UP-REGULATION OF HEME OXYGENASE-1 IMPROVES ENDOTHELIAL FUNCTIONS BY IMPAIRING ENDOTHELIUM-DEPENDENT CONTRACTIONS AND ENHANCING ENDOTHELIUM-DEPENDENT HYPERPOLARIZATIONS	66
ALS Au, CCW Poon, Q Zhang, GPH Leung, SK Kong, HP Ho, YW Kwan	RESTORATION OF BLUNTED INSULIN RELEASE AND $[Ca^{2+}]_i$ CHANGES BY SIMVASTATIN OF ISOLATED PANCREATIC ISLETS OF LANGERHANS OF OBESE/ DIABETIC (db+/db+) MICE	67

WS Cai, FK Ng, HJ Ballard	INVOLVEMENT OF CFTR IN ATP RELEASE FROM CONTRACTING SKELETAL MUSCLE IN ANAESTHETISED RATS	67
YC Chan, YK Lee, KM Ng, WH Lai, D Yang, HF Tse, CW Siu	A NEWLY-DERIVED SMALL SYNTHETIC COMPOUND ALLEVIATED VENTRICULAR FIBRILLATION IN A PIG MODEL WITH CHRONIC MYOCARDIAL INFARCTION AS REVEALED BY OPTICAL MAPPING	68
GHH Chan, SW Chan, CW Lau, Y Huang, PYK Yue, RNS Wong	VASCULAR MODULATION EFFECT OF GINSENG EXTRACTS	68
WS Cheang, XY Tian, WT Wong, SY Tsang, CW Lau, X Yao, Y Huang	NAHS RELAXES RAT CEREBRAL ARTERIES THROUGH INHIBITING L-TYPE CALCIUM CHANNEL	69
OC Lau, CO Wong, Y Huang, X Yao	EXPRESSION OF TRP CHANNELS IN ARTERIAL BARORECEPTOR NEURONS	69
KL Ong, CQ Jiang, B Liu, YL Jin, AWK Tso, S Tam, KS Wong, B Tomlinson, BMY Cheung, JM Lin, XJ Yue, KSL Lam, TH Lam, GN Thomas	ASSOCIATION OF A GENETIC VARIANT IN THE APOLIPOPROTEIN A5 GENE WITH THE METABOLIC SYNDROME IN CHINESE	70
XY Tian, WT Wong, J Tian, P Zhang, N Wang, Y Huang	ROSIGLITAZONE UPREGULATES ENDOTHELIAL EXPRESSION OF ENDOTHELIN B RECEPTOR AND ATTENUATES ENDOTHELIN-1-INDUCED VASOCONSTRICTION	70
J Zhang, YC Chan, HF Tse	CHARACTERIZATION OF MULTIPLE ION CHANNELS IN HUMAN INDUCED PLURIPOTENT STEM CELLS-DERIVED MESENCHYMAL STEM CELLS	71
YH Zhang, CP Lau, HF Tse, GR Li	EXPRESSION OF TRPC AND TRPM CHANNELS IN HUMAN ATRIAL MYOCYTES	71
YZ Zhao, SWS Leung, PM Vanhoutte	ENDOTHELIAL NOS-INDEPENDENT RELEASE OF NITRIC OXIDE IN THE AORTA OF THE SPONTANEOUSLY HYPERTENSIVE RAT	72
Q Zou, PM Vanhoutte	ACTIVATION OF NICOTINIC RECEPTORS CONTRIBUTES TO ACETYLCHOLINE-INDUCED ENDOTHELIUM DEPENDENT RELAXATIONS IN THE AORTA OF THE SPONTANEOUS HYPERTENSIVE RAT	72
J Dong, SL Wong, CW Lau, WT Wong, ZY Chen, X Yao, Y Huang	CALCITRIOL PROTECTS RENOVASCULAR FUNCTION OF OVARECTOMIZED RATS THROUGH THE DOWNREGULATION OF CYCLOOXYGENASE-2 AND TP RECEPTOR	73

CQ Jiang, L Xu, TH Lam, JM Lin, WS Zhang, B Liu, YL Jin, KK Cheng, GN Thomas	DOSE-RESPONSE RELATIONSHIP BETWEEN SMOKING, SMOKING CESSATION STATUS AND CAROTID ATHEROSCLEROSIS: THE GUANGZHOU BIOBANK COHORT STUDY-CVD	73
WH Lai, JCY Ho, YK Li, KW Au, CW Siu, HF Tse	THE POTENCY OF HUMAN INDUCED PLURIPOTENT STEM CELLS (HIPS) DERIVED ENDOTHELIAL PROGENITOR CELLS (EPC) IN THERAPEUTIC ANGIOGENESIS	74
ZF Lai	TNNI3K, A NEW MAP KINASE GENE, COULD BE A MOLECULAR TARGET FOR THE TREATMENT AND DIAGNOSTIC AGENTS ON CARDIAC DISEASES	74
CW Lau, FP Leung, SL Wong, WT Wong, X Yao, Y Li, Y Huang	RUTAECARPINE RELAXES RAT MESENTERIC RESISTANCE ARTERIES VIA THE RELEASE OF ENDOTHELIUM-DERIVED NITRIC OXIDE AND NEUROGENIC CALCITONIN GENERELATED PEPTIDE	75
YK Lee, KM Ng, WH Lai, YC Chan, Q Lian, CP Lau, HF Tse, CW Siu	CALCIUM HANDLING IN HUMAN INDUCED PLURIPOTENT STEM CELL-DERIVED CARDIOMYOCYTES	75
J Liu, WT Wong, XY Tian, LM Liu, SL Wong, CW Lau, J Yu, X Yao, Y Huang	HEMIN RESTORES THE IMPAIRED ENDOTHELIUM DEPENDENT VASODILATATION IN DIABETIC <i>db/db</i> MICE THROUGH PI3K/Akt PATHWAY	76
Y Liu, ML Fung	MELATONIN ATTENUATES INTERMITTENT HYPOXIA INDUCED OXIDATIVE STRESS AND TISSUE INFLAMMATION IN RAT ADRENAL MEDULLA	76
CCW Poon, ALS Au, Q Zhang, SK Kong, HP Ho, GPH Leung, YW Kwan	N-ACETYL-L-CYSTEINE REDUCES HIGH GLUCOSE INDUCED MITOCHONDRIAL ROS GENERATION AND CORTICAL F-ACTIN CYTOSKELETON LEVELS IN PANCREATIC ISLETS β -CELLS OF OBESE/DIABETIC MICE	77
ASM Sit, EYW Ho, RWS Li, RYK Man, YW Kwan, M Hausman, PM Vanhoutte, GPH Leung	ERGOTHIONEINE PROTECTS ENDOTHELIAL CELLS FROM OXIDATIVE STRESS	77
YY Tam, WT Wong, XY Tian, WS Cheang, CW Lau, AM Xu, Y Huang	BLACK TEA POLYPHENOLS IMPROVE ENDOTHELIAL FUNCTION IMPAIRED BY HOMOCYSTEINE IN RAT AORTAS	78
M Wang, ML Xia , XM Zhou, XY Xie	ROLE OF JUMI EXTRACTION IN ACUTE RENAL FAILURE RATS	78

HJ Wu, W Wu, GR Li	RATE-DEPENDENT BLOCK OF HKV1.5 CHANNELS AND THE MOLECULAR DETERMINANT BY THE NATURAL FLAVONE ACACETIN	78
ML Xia, M Wang, YY Huang	CONTRAST OF MEAN ARTERIAL BLOOD PRESSURE, HEART RATE AND AORTIC TENSION INDUCED BY CLP & LPS SEPTIC SHOCK IN RATS	79
CY Yuen, SL Wong, CW Lau, B Tomlinson, X Yao, Y Huang	TELMISARTAN PROMOTES RELAXATIONS BY INCREASING PPAR γ -DEPENDENT NITRIC OXIDE PRODUCTION IN MOUSE MESENTERIC ARTERIES	79
Q Zhang, MF Wong, FY Kwok, ALS Au, CCW Poon, GPH Leung, SK Kong, HP Ho, CH Cho, YW Kwan	ROLE OF AMPK AND HMG COA REDUCTASE IN SIMVASTATIN-MEDIATED INSULIN RELEASE FROM PORCINE ISOLATED PANCREATIC ISLETS OF LANGERHANS	80
Q Zhang, ALS Au, CCW Poon, GPH Leung, SK Kong, HP Ho, YW Kwan	MONOAMINE OXIDASE-A-MEDIATED GENERATION OF REACTIVE OXYGEN SPECIE BY 5-HYDROXYTRYPTAMINE IN HUVECS	80
Y Zhang, SWS Leung, RYK Man	GENDER-SPECIFIC RELAXATION OF FLAVONOIDS IN RAT MESENTERIC ARTERIES	81
Z Li, LB Qian, ML Xia, HP Wang, M Treiman, Q Xia	GLP-1(9-36)AMIDE AND EXENDIN-4 PROTECT ISOLATED CARDIOMYOCYTES FROM ADULT RATS AGAINST ISCHEMIA-REPERFUSION INJURY THROUGH DIFFERENT PATHWAYS	81
Y Lu, XY Tian, WT Wong, LM Liu, J Liu, CW Lau, X Yao, Y Huang	ADVANCED GLYCATION END PRODUCT INDUCES ENDOTHELIAL DYSFUNCTION IN MOUSE AORTAS THROUGH MITOCHONDRIAL REACTIVE OXYGEN SPECIES	82
LCM Lau, WYW Lee, AKF Chan, CCW Poon, PPY Lui, CKM Chan, SK Kong, GPH Leung, YW Kwan	IN VITRO SYNERGISTIC BONE ANABOLIC EFFECTS OF 1,25(OH) $_2$ VITAMIN D $_3$ AND CU409B1 IN RAT OSTEOBLASTS	82

Publications of ICSM Members in 2010

Andersen H, Jaff MG, Hogh D, Vanhoutte P, Hansen PB. Adenosine elicits an eNOS-independent reduction in arterial blood pressure in conscious mice that involves adenosine A_{2A} receptors. *Acta Physiologica*, published on line, Dec 2010.

Bai XY, Liu XC, Jing WB, Yang Q, Tang XD, He GW. Effect of Amlodipine in Human Internal Mammary Artery and Clinical Implications. *Annals of Thoracic Surgery* 90: 1952-7, 2010.

Chan CW, Kwong YL, Kwong RY, Lau CP, Tse HF. Improvement of myocardial perfusion reserve detected by cardiovascular magnetic resonance after direct endomyocardial implantation of autologous bone marrow cells in patients with severe coronary artery disease. *Journal of Cardiovascular Magnetic Resonance*. Jan 25;12: 6, 2010.

Chan YC, Leung FP, Wong WT, Tian XY, Yung LM, Lau CW, Tsang SY, Yao X, Chen ZY, Huang Y. Therapeutically relevant concentrations of raloxifene dilate pressurized rat resistance arteries via calcium-dependent endothelial nitric oxide synthase activation. *Arteriosclerosis Thrombosis and Vascular Biology*. 30(5): 992-9, 2010.

Chang J, Li Y, Huang Y, Lam K, Hoo R, Wong WT, Cheng K, Wang Y, Vanhoutte P, Xu, A. Adiponectin prevents diabetic premature senescence of endothelial progenitor cells and promotes endothelial repair by suppressing the p38 MAP kinase/p16INK4A signalling pathway. *Diabetes*, 59: 2949-2959, 2010.

Cheang WS, Wong WT, Shen B, Lau CW, Tian XY, Tsang SY, Yao X, Chen ZY, Huang Y. 4-Aminopyridine-sensitive K(+) channels contributes to NaHS-induced membrane hyperpolarization and relaxation in the rat coronary artery. *Vascular Pharmacology*. 53: 94-8, 2010.

Chen C, Tso AW, Law LS, Cheung BM, Ong KL, Wat NM, Janus ED, Xu A, Lam KS. Plasma Level of Pigment Epithelium-Derived Factor Is Independently Associated with the Development of the Metabolic Syndrome in Chinese Men: A 10-Year Prospective Study. *Journal of Clinical Endocrinology & Metabolism*. 95: 5074-81, 2010.

Chen JB, Tao R, Sun HY, Tse HF, Lau CP, Li GR. Multiple Ca²⁺ signaling pathways regulate intracellular Ca²⁺ activity in human cardiac fibroblasts. *Journal of Cell Physiology*. 233: 68-75, 2010.

Chen ZW, Yang Q, Huang Y, Fan L, Li XW, He GW. Human urotensin II in internal mammary and radial arteries of patients undergoing coronary surgery. *Vascular Pharmacology* 52: 70-6, 2010.

Cheung BM, Lam KS. Is intensive LDL-cholesterol lowering beneficial and safe? *Lancet*. 376(9753): 1622-4, 2010.

Cheung BM. The hypertension-diabetes continuum. *Journal of Cardiovascular Pharmacology*. 55(4): 333-9, 2010.

Cheung BMY, Ong KL. The Challenge of Managing Hypertension. In: Finkel ML, ed., Public Health in the 21st Century. Santa Barbara, CA: Praeger Publishing. 2010.

Cheung BMY. Behind the rosiglitazone controversy. *Expert Review of Clinical Pharmacology* 3: 723-5, 2010.

Cheung CY, Tso AW, Cheung BM, Xu A, Ong KL, Fong CH, Wat NM, Janus ED, Sham PC, Lam KS. Obesity susceptibility genetic variants identified from recent genome-wide association studies: implications in a chinese population. *Journal of Clinical Endocrinology & Metabolism*. 95(3): 1395-403, 2010.

Cheung EWY, Wong WHS, Cheung YF. Systematic Review and Meta-Analysis of Pulmonary Valve Replacement in Children and Adults After Surgical Repair of Tetralogy of Fallot. *American Journal of Cardiology* 106: 552-557, 2010.

Cheung YF, Hong WJ, Chan GCF, Wong SJ, Ha SY. Left Ventricular Myocardial Deformation and Mechanical Dyssynchrony in Children with Normal Ventricular Shortening Fraction after Anthracycline Therapy. *Heart* 96: 1137-1141, 2010.

Cheung YF, Liang XC, Chan GCF, Wong SJ, Ha SY. Myocardial deformation in patients with beta-thalassaemia major: a speckle tracking echocardiographic study. *Echocardiography* 27: 253-259, 2010.

Cheung YF. Arterial stiffness in the young: assessment, determinants, and implications. *Korean Circulation Journal* 40: 153-162, 2010.

Chu LW, Tam S, Wong RL, Yik PY, Song Y, Cheung BM, Morley JE, Lam KS. Bioavailable Testosterone Predicts a Lower Risk of Alzheimer's Disease in Older Men. *Journal of Alzheimers Disease*. 21(4): 1355-45, 2010.

Dai YL, Luk TH, Siu CW, Yiu KH, Chan HT, Lee SW, Li SW, Tam S, Fong B, Lau CP, Tse HF. Myocardial dysfunction induced by statin contributes to endothelial dysfunction in patients with coronary artery disease. *Cardiovascular Toxicology*. 10(2): 130-8, 2010.

Dong MQ, Sun HY, Tang Q, Tse HF, Lau CP, Li GR. Regulation of human cardiac KCNQ1/KCNE1 channel by epidermal growth factor receptor kinase. *Biochimica et Biophysica Acta*. 1798: 995-1001, 2010.

Dong MQ, Sun HY, Tang Q, Tse HF, Lau CP, Li GR. Regulation of human cardiac KCNQ1/KCNE1 channel by epidermal growth factor receptor kinase. *Biochimica et Biophysica Acta*. 1798(5): 995-1001, 2010.

Eguti DMN, Thieme K, Leung GPH, Mello-Aires M, Oliveira-Souza M. Regulation of Na⁺/H⁺-exchanger isoform 1 (NHE1) by calmodulin-binding sites: role of angiotensin II. *Cell Physiology & Biochemistry* 26(4-5): 541-52, 2010.

Fan L, Yang Q, Xiao XQ, Grove KL, Huang Y, Chen ZW, Furnary A, He GW. Dual actions of cilnidipine in human internal thoracic artery: Inhibition of calcium channels and enhancement of endothelial nitric oxide synthase. *Journal of Thoracic and Cardiovascular Surgery* 141(4): 1063-9, 2011. [Epub ahead of print Jul 6, 2010].

Félétou M, Cohen RA, Vanhoutte PM, Verbeuren TJ. TP receptors and oxidative stress: hand in hand from endothelial dysfunction to atherosclerosis. In: Paul M Vanhoutte (Ed.) *Advances in Pharmacol* 60, pp.85-106, 2010.

Ferner RE, Cheung BMY. Drug therapy: special considerations in diabetes. In: Holt, Flyvbjerg, Goldstein, Cockram, ed. *Textbook of diabetes*, 4th edition. Oxford: Blackwell 2010.

Goh VK, Lau CP, Mohlenkamp S, Rumberger JA, Achenbach S, Budoff MJ. Outcome of coronary plaque burden: a 10-year follow-up of aggressive medical management. *Cardiovascular Ultrasound*. 8: 5, 2010.

Ho LY, Siu CW, Yue WS, Lau CP, Lip GY, Tse HF. Safety and efficacy of oral anticoagulation therapy in Chinese patients with concomitant atrial fibrillation and hypertension. *Journal of Human Hypertension*. 25(5): 304-10, 2011. Epub Jul 1, 2010.

Hong WJ, Yung TC, Lun KS, Wong SJ, Cheung YF. Impact of temporary interruption of right ventricular pacing for heart block on left ventricular function and dyssynchrony. *Pacing and Clinical Electrophysiology* 33: 41-48, 2010.

Hoque KM, Woodward OM, van Rossum DB, Zachos NC, Chen L, Leung GPH, Guggino WB, Guggino SE, Tse CM. Epac1 mediates protein kinase A-independent mechanism of forskolin-activated intestinal chloride secretion. *Journal of General Physiology* 135(1): 43-58, 2010.

Huang XR, Chung AC, Yang F, Yue W, Deng C, Lau CP, Tse HF, Lan HY. Smad3 mediates cardiac inflammation and fibrosis in angiotensin II-induced hypertensive cardiac remodeling. *Hypertension*. 55(5): 1165-71, 2010.

Hui EP, Lui VW, Wong CS, Ma BB, Lau CP, Cheung CS, Ho K, Cheng SH, Ng MH, Chan AT. Preclinical evaluation of sunitinib as single agent or in combination with chemotherapy in nasopharyngeal carcinoma. *Investigation of New Drugs*. [Epub ahead of print: 15 May 2010] PubMed PMID: 20467883.

Jiang CQ, Lam TH, Lin JM, Liu B, Yue XJ, Cheng KK, Tomlinson B, Wong KS, Cheung BM, Thomas GN. An overview of the Guangzhou Biobank Cohort Study-Cardiovascular Disease Subcohort (GBCS-CVD): a platform for multidisciplinary collaboration. *Journal of Human Hypertension*. 24(2): 139-50, 2010.

Jiang CQ, Lam TH, Liu B, Lin JM, Yue XJ, Jin YL, Cheung BM, Thomas GN. Interleukin-6 Receptor Gene Polymorphism Modulates Interleukin-6 Levels and the Metabolic Syndrome: GBCS-CVD. *Obesity* (Silver Spring). 18(10): 1969-74, 2010.

Jiang CQ, Liu B, Cheung BM, Lam TH, Lin JM, Jin YL, Yue XJ, Ong KL, Tam S, Wong KS, Tomlinson B, Lam KS, Thomas GN. A single nucleotide polymorphism in *APOA5* determines triglyceride levels in Hong Kong and Guangzhou Chinese. *European Journal of Human Genetics*. 18(11): 1255-60, 2010.

Jim MH, Chan AO, Tse HF, Barold SS, Lau CP. Clinical and angiographic findings of complete atrioventricular block in acute inferior myocardial infarction. *Annals of the Academy of Medicine Singapore*. 39(3): 185-90, 2010.

Jim MH, Hau WK, Ko RL, Siu CW, Ho HH, Yiu KH, Lau CP, Chow WH. Virtual histology by intravascular ultrasound study on degenerative aortocoronary saphenous vein grafts. *Canadian Journal of Cardiology*. 25(9): 509-15, 2010.

Jim MH, Ho HH, Ko RL, Siu CW, Yiu KH, Lau CP, Chow WH. Paclitaxel-Eluting Stents for Chronically Occluded Saphenous Vein Grafts (EOS) Study. *Journal of Interventional Cardiology*. 23(1): 40-5, 2010.

- Koh C, Hong WJ, Wong SJ, Cheung YF. Systolic-diastolic coupling of myocardial deformation of the left ventricle in children with left ventricular noncompaction. *Heart Vessels* 25: 493-499, 2010.
- Lai WH, Ho JC, Lee YK, Ng KM, Au KW, Chan YC, Lau CP, Tse HF, Siu CW. ROCK inhibition facilitates the generation of human-induced pluripotent stem cells in a defined, feeder-, and serum-free system. *Cellular Reprogramming*. 12(6): 641-53, 2010.
- Lau CP, Siu CW. Pacing technology: advances in pacing threshold management. *Journal of Zhejiang University SCIENCE B*. 11(8): 634-8, 2010.
- Lee YK, Ng KM, Chan YC, Lai WH, Au KW, Ho CY, Wong LY, Lau CP, Tse HF, Siu CW. Triiodothyronine promotes cardiac differentiation and maturation of embryonic stem cells via the classical genomic pathway. *Molecular Endocrinology* 24(9): 1728-36, 2010.
- Lee MYK, Vanhoutte PM. Inflammation and endothelial dysfunction with aging. In: S.M. Dauphinee & A. Karsan (Eds.) *Endothelial Dysfunction and Inflammation*. Pg. 189-200, 2010. Springer Basel AG.
- Leung YK, Du J, Huang Y, Yao X. Cyclic nucleotide-gated channels contribute to thromboxane α_2 -induced contraction of rat small mesenteric arteries. *PLoS One* 5(6): e11098, 2010.
- Li GR, Dong MQ. Pharmacology of cardiac potassium channels. *Advances in Pharmacology*. 59: 93-134, 2010.
- Li M, Ong KL, Tse HF, Cheung BM. Utilization of lipid lowering medications among adults in the United States 1999-2006. *Atherosclerosis*. 208(2): 456-60, 2010.
- Li X, Cheng LC, Cheung YF, Lun KS, Chau KT, Shui WC. Management of symptomatic congenital tracheal stenosis in neonates and infants by slide tracheoplasty: a 7-year single institution experience. *European Journal of Cardio-thoracic Surgery* 38: 609-614, 2010.
- Liang XC, Lam WWM, Cheung EWY, Wu AKP, Wong SJ, Cheung YF. Restrictive right ventricular physiology and right ventricular fibrosis as assessed by cardiac magnetic resonance and exercise capacity after biventricular repair of pulmonary atresia and intact ventricular septum. *Clinical Cardiology* 33: 104-110, 2010.
- Liao SY, Liu Y, Siu CW, Zhang Y, Lai WH, Au KW, Lee YK, Chan YC, Yip PM, Wu EX, Wu Y, Lau CP, Li RA, Tse HF. Proarrhythmic risk of embryonic stem cell-derived cardiomyocyte transplantation in infarcted myocardium. *Heart Rhythm* 7(12): 1852-9, 2010.
- Liao SY, Siu CW, Liu Y, Zhang Y, Chan WS, Wu EX, Wu Y, Nicholls JM, Li RA, Benser ME, Rosenberg SP, Park E, Lau CP, Tse HF. Attenuation of left ventricular adverse remodelling with epicardial patching after myocardial infarction. *Journal of Cardiac Failure* 16: 590-598, 2010
- Lin AHY, Leung GPH, Leung SWS, Vanhoutte PM, Man RYK. Genistein enhances relaxation of the spontaneously hypertensive rat aorta by transactivation of epidermal growth factor receptor upon binding to membrane estrogen receptors- α and activation of a G protein-coupled, endothelial nitric oxide synthase-dependent pathway. *Pharmacological Research*, 63: 181-189, 2011.
- Liu CQ, Wong SL, Leung FP, Tian X, Lau CW, Lu L, Yao X, Chen ZY, Yao T, Huang Y. Prostanoid TP Receptor-mediated Impairment of Cyclic AMP-dependent Vasorelaxation is Reversed by Phosphodiesterase Inhibitors. *European Journal of Pharmacology* 632: 45-51, 2010.

Liu H, Yang L, Jin MW, Sun HY, Huang Y, Li GR. The estrogen receptor modulator raloxifene blocks human cardiac delayed rectifier potassium currents without QTc interval prolongation. *Pharmacology Research*. 62: 384-390, 2010.

Luan Y, Liu XC, Zhang GW, Shi RF, Zhao XB, Zhao CH, Liu TJ, Lü F, Yang Q, He GW. Mid-term effect of stem cells combined with transmyocardial degradable stent on swine model of acute myocardial infarction. *Coronary Artery Disease* 21: 233-43, 2010.

Ma X, Qiu S, Luo JH, Ma Y, Ngai CY, Shen B, Wong CO, Huang Y, Yao X. Functional role of TRPV4-TRPC1 complex in flow-induced Ca²⁺ influx. *Arteriosclerosis, Thrombosis, and Vascular Biology*. 30(4): 851-8, 2010.

Ma X, Cao JY, Luo JH, Nilius B, Huang Y, Ambudkar IS, Yao X. Depletion of intracellular Ca²⁺ stores stimulates the translocation of TRPV4-C1 heteromers to the plasma membrane. *Arteriosclerosis, Thrombosis, and Vascular Biology*. 30(11): 2249-55, 2010.

Mills P, Timmis A, Huber K, Ector H, Lancellotti P, Masic I, Ivanusa M, Antoniadou L, Aschermann M, Laucevicius A, Mustonen P, Artigou JY, Vardas P, Stefanadis C, Chiarello M, Bolognese L, Ambrosio G, van der Wall EE, Ku?akowski P, Pinto FJ, Apetrei E, Oganov RG, Kamensky G, Luscher TF, Lerch R, Haouala H, Sansoy V, Shumakov V, Tajer CD, Lau CP, Marquez M, Krittayaphong R, Arai K, Alfonso F; The role of European national journals in education. *Journal of Cardiovascular Medicine* (Hagerstown). 11(1): 64-7, 2010.

Ng KM, Lau CF, Fung ML. Melatonin reduces hippocampal beta-amyloid generation in rats exposed to chronic intermittent hypoxia. *Brain Research*, 1354: 163-171, 2010.

Ng KM, Lee YK, Chan YC, Lai WH, Fung ML, Li RA, Siu CW, Tse HF. Exogenous expression of HIF-1 α promotes the cardiac differentiation of embryonic stem cells. *Journal of Molecular and Cellular Cardiology*, 48(6): 1129-1137, 2010.

Ngai CY, Yao X. Vascular Responses to Shear Stress: The Involvement of Mechanosensors in Endothelial Cells. *The Open Circulation and Vascular Journal* 3: 85-94, 2010.

Ong KL, Li M, Tso AW, Xu A, Cherny SS, Sham PC, Tse HF, Lam TH, Cheung B, Lam K. Association of genetic variants in the adiponectin gene with adiponectin level and hypertension in Hong Kong Chinese. *European Journal of Endocrinology*. 163(2): 251-7, 2010.

Ong KL, Tso AW, Cherny SS, Sham PC, Lam KS, Jiang CQ, Thomas GN, Lam TH, Cheung BM. A genetic variant in the gene encoding fibrinogen beta chain predicted development of hypertension in Chinese men. *Thrombosis & Haemostasis*. 103(4): 728-35, 2010.

Ong KL, Tso AW, Lam KS, Cherny SS, Sham PC, Cheung BM. Using glycosylated hemoglobin to define the metabolic syndrome in United States adults. *Diabetes Care*. 33(8): 1856-8, 2010.

Poon CCW, Seto SW, Au ALS, Zhang Q, Li RWS, Lee WYW, Chan SW, Leung GPH, Kong SK, Yeung JHK, Ngai SM, Ho AHP, Lee SMY, Kwan YW. Mitochondrial monoamine oxidase A-mediated hydrogen peroxide generation enhances 5-hydroxytryptamine-induced contraction of rat basilar artery. *British Journal of Pharmacology* 161(5): 1086-98, 2010.

Seto SW, Lam TY, Or PM, Lee WY, Au AL, Poon CC, Li RWS, Chan SW, Yeung JH, Leung GPH, Lee SMY, Ngai SM, Kwan YW. Folic acid consumption reduces resistin level and restores blunted acetylcholine-induced aortic relaxation in obese/diabetic mice. *Journal of Nutritional Biochemistry* 21(9): 872-80, 2010.

Siu CW, Pong V, Ho HH, Liu S, Lau CP, Li SW, Tse HF. Are MADIT II criteria for implantable cardioverter defibrillator implantation appropriate for Chinese patients? *Journal of Cardiovascular Electrophysiology*. 21(3): 231-5, 2010.

Siu CW, Pong V, Jim MH, Yue WS, Ho HH, Li SW, Lau CP, Tse HF. Beta blocker in post-myocardial infarct survivors with preserved left ventricular systolic function. *Pacing & Clinical Electrophysiology*. 33(6): 675-80, 2010.

Tang EH, Shvartz E, Shimizu K, Rocha VZ, Zheng C, Fukuda D, Shi GP, Sukhova G, Libby P. Deletion of EP4 on bone marrow-derived cells enhances inflammation and angiotensin II-induced abdominal aortic aneurysm formation. *Arteriosclerosis Thrombosis & Vascular Biology*. 31(2): 261-9, 2010.

Tang EH, Vanhoutte PM. Endothelial dysfunction: a strategic target in the treatment of hypertension? *Pflugers Archiv*. 459(6): 995-1004, 2010.

Tang JY, Li S, Li ZH, Zhang ZJ, Hu G, Cheang LC, Alex D, Hoi MP, Kwan YW, Chan SW, Leung GPH, Lee SM. Calycosin promotes angiogenesis involving estrogen receptor and mitogen-activated protein kinase (MAPK) signaling pathway in zebrafish and HUVEC. *PLoS One* 5(7):e11822, 2010.

Thomas GN, Jiang CQ, Taheri S, Xiao ZH, Tomlinson B, Cheung BM, Lam TH, Barnett AH, Cheng KK. A systematic review of lifestyle modification and glucose intolerance in the prevention of type 2 diabetes. *Current Diabetes Reviews*. 6(6): 378-87, 2010.

Tipoe GL, Leung TM, Liong EC, Lau TYH, Fung ML, Nanji AA. Epigallocatechin-3-gallate (EGCG) reduced liver inflammation, oxidative stress and fibrosis in carbon tetrachloride (CCl4)-induced liver injury in mice. *Toxicology*, 273(1-3): 45-52, 2010.

Tu J, Le G, Ballard HJ. (2010). Involvement of the cystic fibrosis transmembrane conductance regulator in the acidosis-induced efflux of ATP from rat skeletal muscle. *The Journal of Physiology*, 588, 4563-4578, 2010.

Webber M, Krishnan A, Thomas NG, Cheung BM. Association between serum alkaline phosphatase and C-reactive protein in the United States National Health and Nutrition Examination Survey 2005-2006. *Clinical Chemistry & Laboratory Medicine*. 48(2): 167-73, 2010.

Wong CO, Huang Y, Yao X. Genistein potentiates TRPC5 activity independently of tyrosine kinases. *British Journal of Pharmacology*. 159: 1486-1496, 2010.

Wong CY, Yiu KH, Li SW, Lee S, Tam S, Lau CP, Tse HF. Fish oil supplement has neutral effects on vascular and metabolic function but improves renal function in patients with Type 2 diabetes mellitus. *Diabetic Medicine*. 27(1): 54-60, 2010.

Wong WT, Tian XY, Chen Y, Leung FP, Liu L, Lee HK, Ng CF, Xu A, Yao X, Vanhoutte PM, Tipoe GL, Huang Y. Bone morphogenic protein-4 impairs endothelial function through oxidative stress-dependent cyclooxygenase-2 upregulation: implications on hypertension. *Circulation Research*. 107(8): 984-91, 2010.

Wong WT, Tian XY, Xu A, Ng CF, Lee HK, Chen ZY, Au CL, Yao X, Huang Y. Angiotensin II Type 1 Receptor-Dependent Oxidative Stress Mediates Endothelial Dysfunction in Type 2 Diabetic Mice. *Antioxidants & Redox Signaling*. 13: 757-68, 2010.

Wong, CO, Sukumar P, Beech DJ, Yao X. Nitric oxide lacks direct effect on TRPC5 channels but suppresses endogenous TRPC5-containing channels in endothelial cells. *Pfluger Archiv*. 460(1): 121-30, 2010.

Wong ESW, Man RYK, Vanhoutte PM, Ng KFJ. Dexmedetomidine induces both relaxations and contractions, via different α_2 -adrenoceptor subtypes, in the isolated mesenteric artery and aorta of the rat. *Journal of Pharmacology & Experimental Therapeutics*., 335: 659-664, 2010.

Wong MSK, Man RYK, Vanhoutte PM. Calcium-independent phospholipase A₂ plays a key role in the endothelium-dependent contractions to acetylcholine in the aorta of the spontaneously hypertensive rat. *American Journal of Physiology Heart & Circulatory Physiology*, 298: H1260-H1266, 2010.

Wong MSK, Vanhoutte PM. COX-mediated endothelium-dependent contractions: from the past to recent discoveries. *Acta Pharmacologica Sinica*, 31: 1095-1102, 2010.

Wong WT, Tian XY, Chen Y, Leung FP, Liu L, Lee HK, Ng CF, Xu A, Yao X, Vanhoutte PM, Tipoe GL, Huang Y. Bone morphogenic protein-4 impairs endothelial function through oxidative stress-dependent cyclooxygenase-2 upregulation – implications on hypertension. *Circulation Research*, 107: 984-991, 2010.

Wu JH, Li Q, Wu MY, Guo DJ, Chen HL, Chen SL, Seto SW, Au AL, Poon CC, Leung GPH, Lee SM, Kwan YW, Chan SW. Formononetin, an isoflavone, relaxes rat isolated aorta through endothelium-dependent and endothelium-independent pathways. *Journal of Nutritional Biochemistry* 21(7): 613-20, 2010.

Xue HM, He GW, Huang JH, Yang Q. New Strategy of Endothelial Protection in Cardiac Surgery: Use of Enhancer of Endothelial Nitric Oxide Synthase. *World Journal of Surgery*. 34: 1461-9, 2010.

Yan GH, Wang M, Yue WS, Yiu KH, Siu CW, Lee SW, Lau CP, Tse HF. Elevated pulmonary artery systolic pressure in patients with coronary artery disease and left ventricular dyssynchrony. *European Journal of Heart Failure*. 12(10): 1067-75, 2010.

Yang C, Kwan YW, Au AL, Poon CC, Zhang Q, Chan SW, Lee SMY, Leung GPH. 14,15-Epoxyeicosatrienoic acid induces vasorelaxation through the prostaglandin EP(2) receptors in rat mesenteric artery. *Prostaglandins & Other Lipid Mediators* 93(1-2): 44-51, 2010.

Yang C, Kwan YW, Chan SW, Lee SMY, Leung GPH. Potentiation of EDHF-mediated relaxation by chloride channel blockers. *Acta Pharmacologica Sinica* 31(10): 1303-11, 2010.

Yang Q, Huang JH, Man YB, Yao XQ, He GW. Use of intermediate/small conductance calcium-activated potassium-channel activator for endothelial protection. *Journal of Thoracic Cardiovascular Surgery*. 141(2): 501-10.

Yiu KH, Cheung BM, Tse HF. A new paradigm for managing dyslipidemia with combination therapy: laropiprant + niacin + simvastatin. *Expert Opinion on Investigational Drugs*. 19(3): 437-49, 2010.

Yiu KH, Tse HF, Lau CP. Ventricular Tachycardia Complicating Head-Up Tilt test. *Pacing & Cardiovascular Electrophysiology*. 1-3, 2010. PMID: 20636319

Yiu KH, Wang S, Mok MY, Ooi GC, Khong PL, Lau CP, Lai WH, Wong LY, Lam KF, Lau CS, Tse HF. Role of circulating endothelial progenitor cells in patients with rheumatoid arthritis with coronary calcification. *Journal of Rheumatology*. 37(3): 529-35, 2010.

Zhang R, Zhang YY, Huang XR, Wu Y, Chung AC, Wu EX, Szalai AJ, Wong BC, Lau CP, Lan HY. C-reactive protein promotes cardiac fibrosis and inflammation in angiotensin ii-induced hypertensive cardiac disease. *Hypertension*. 55(4): 953-60, 2010.

Zhang XH, Jin MW, Sun HY, Zhang S, Li GR. The calmodulin inhibitor W-7 directly blocks human ether α -go-go-related gene potassium channels stably expressed in HEK 293 cells. *British Journal of Pharmacology*. 161: 872-884, 2010.