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. The first elected Council of the Institute completed its 2-year term of office in 1999, and the second Council was duly elected at the Annual General Meeting on 30th October 1999. The present members of the Council are:

Director: Professor C.P. Lau
Deputy Director: Professor R.Y.K. Man
Honorary Secretary: Dr. H.J. Ballard
Honorary Treasurer: Dr. A.K.T. Chau

Council Members:
Dr. B.M.Y. Cheung
Dr. Y.F. Cheung
Dr. M.L. Fung
Professor G.W. He
Professor C.R. Kumana
Dr. K.L.F. Lee
Dr. Karmin O
Professor M.P. Leung
Dr. H.F. Tse
Professor T.M. Wong

Fellowship & Grants Sub-Committee
Professor G.W. He
Professor C.R. Kumana
Professor T.M. Wong
Professor R.Y.K. Man
Professor M.P. Leung

Membership Sub-Committee
Dr. H.J. Ballard
Professor T.M. Wong
Professor G.W. He

International Advisory Board

The International Advisory Board comprises heads of world-renowned cardiovascular research centres around the world, who advise the Institute’s Council on the development and future direction of the Institute. The members of the Board are:

Professor Morris Brown, University of Cambridge
Professor John Cairns, Dean, University of British Columbia
Professor John Camm, University of London
Professor Victor Dzau, Harvard University
Professor David Hearse, Director of the Rayne Institute, London
Sir John Vane, Nobel Laureate, Director of the William Harvey Institute, London
Membership

Membership of the Institute of Cardiovascular Science and Medicine increased by 30% in 1999. Membership currently stands at 86, comprising 12 Founding Members, 34 Full Members, 12 Associate members and 28 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.
RESEARCH ACTIVITIES OF THE ICSM

Organisation of Research

Discussions continued throughout 1999 on how to facilitate and promote collaborative research in cardiovascular science and medicine among our members. As a result, the Institute's collaborative research program has been restructured into three special-interest groups, in which we have a sufficient critical mass of highly active researchers to further develop the field. The research groupings are as follows:

Atherosclerosis (convenors: Professor R.Y.K. Man and Dr. Karmin O)
researchers: Professor S.W.K. Cheng, Dr. L. Chow, Professor A.J. Hedley, Professor C.R. Kumana, Professor T.H. Lam, Professor C.P. Lau

Hypertension (convenor: Dr. Bernard Cheung)
researchers: Professor C.R. Kumana, Professor C.P. Lau, Dr. K.L.F. Lee, Dr. F.M. Mo, Dr. K.M. Tam, Professor F. Tang

Hypoxia & myocardial function (convenor: Professor T.M. Wong)
researchers: Dr. H.J. Ballard, Dr. J.P. Bourreau, Dr. A.K.T. Chau, Dr. Y.F. Cheung, Dr. M.L. Fung, Professor C.R. Kumana, Dr. M.S. Lee, Professor M.P. Leung, Dr. F.M. Mo, Dr. H.F. Tse

Within these groupings, several collaborative research proposals were submitted to the RGC for funding consideration; the outcome of those applications will be available in May-June 2000.

Research grants awarded by the RGC to ICSM members in 1999

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Award (HK$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor G.W. He</td>
<td>Protection of coronary endothelium – smooth muscle function during cardiac surgery.</td>
<td>991,047</td>
</tr>
<tr>
<td>Dr. H.Y. Lan</td>
<td>Regulation of renal macrophage migration inhibitory factor (MIF) expression: mechanism of MIF in renal immune injury.</td>
<td>775,500</td>
</tr>
<tr>
<td>Professor T.M. Wong</td>
<td>Delayed cardioprotection of preconditioning with ischaemia and k-opioid: Ca2+ homeostasis, signal transduction and clinical implications.</td>
<td>709,500</td>
</tr>
<tr>
<td>Dr. M.L. Fung</td>
<td>The role of voltage-gated sodium channels in central neurons during hypoxia.</td>
<td>647,900</td>
</tr>
<tr>
<td>Dr. B.M.Y. Cheung</td>
<td>Angiotensin-converting enzyme, bradykinin and endothelial function</td>
<td>597,880</td>
</tr>
<tr>
<td>Dr J.P. Bourreau</td>
<td>Modulation of voltage-dependent calcium entry during muscarinic stimulation in airway smooth muscle</td>
<td>577,500</td>
</tr>
</tbody>
</table>

4,299,327
Scientific Meetings

The Institute of Cardiovascular Science and Medicine organised two Scientific Meetings in 1999, and also hosted the core curriculum in cardiology for trainee cardiologists at the University of Hong Kong:

University Program 1999:
Core Curriculum in Cardiology

The ICSM hosted this year's core curriculum in cardiology, which was held at the Gold Coast Hotel on July 24-25, 1999, and had the theme of Coronary Artery Disease.

The Asia-Pacific Cardiology Forum

The Asia-Pacific Cardiology Forum was organised by the ICSM, in collaboration with the Tokyo Woman Medical University, and held at the Hyatt Regency Hotel, Osaka, Japan on 1-3 October 1999. Aimed at practicing cardiologists, the programme utilised interactive case presentations, panel discussions and plenary lectures to enhance the knowledge of delegates in the clinical management of common cardiology problems. Particular foci of attention included heart failure, coronary artery disease, atrial arrhythmia, preventive approaches to sudden death, and new frontiers in cardiovascular pharmacotherapy. Distinguished speakers at the forum included ICSM members Professor C.P. Lau, Dr. Kathy Lee, Dr. Katherine Fan, Dr. William Ng, Professor John Sanderson, Dr. H.F. Tse, and Dr. S.H. Wan, Tokyo Woman Medical College members Dr. Masatoshi, Dr. Morio Shoda and Dr. Yukio Tsurumi, as well as international contributors Professor Philip Barter (Royal Adelaide Hospital, Australia), Dr. Alfred Cheng (Tan Tock Seng Hospital, Singapore), Dr. Ryuichi Morishito (Osaka University, Japan), and Dr. Delon Wu (Chang Gung University College of Medicine, Taiwan).

The Third Annual Scientific Meeting:
Bridging Cardiovascular Science and Medicine

The Third Annual Scientific Meeting was held at the Hong Kong Convention and Exhibition Centre on 30th October 1999. As always, the annual scientific meeting focussed on the interaction of cardiovascular science with cardiovascular medicine; session themes included the bridging of cardiovascular science and medicine, as well as vascular smooth muscle and endothelium, cardiac surgery and cardiology. The meeting attracted almost 250 attendees, and more than one third of the papers submitted were from outside Hong Kong, including China, Japan, Europe and North America. Abstracts from the meeting were published in the October 1999 issue of the Journal of the Hong Kong College of Cardiology (volume 7, number 2). Selected papers from the meeting will be published later this year in an international journal, Clinical and Experimental Pharmacology and Physiology. Distinguished speakers at the meeting included Professor Wolfgang Graier from the University of Graz, Austria, Professor Peter Pang from the University of Hong Kong and Professor Finn Waagstein from the University of Göteborg, Sweden. Professor Albert Starr, the great pioneer of heart valve transplantation, gave a video presentation.
Lectures

Professor Peter K.T. Pang, Program Director of the International Research program on Traditional Chinese and Natural Medicine, University of Hong Kong, gave a very interesting talk entitled "Parathyroid hypertension (hypercytocalcic) factor, a primary causative factor for low renin hypertension" to members of the Institute and the Department of Physiology on Wednesday March 17\textsuperscript{th} 1999.

Professor Alexander Turpie, Professor of Medicine at McMaster University delivered a lecture to the Institute entitled "Anti-thrombolytic therapy in coronary ischaemia" on Tuesday May 25\textsuperscript{th} 1999. Professor Turpie is a world authority on thrombolytics, low-molecular-weight heparin and antiplatelet therapy. He was involved in the ISIS studies and the recent ESSENCE trial, and we were very fortunate to have such a distinguished speaker talking on such a hot topic.

Visitors

Professor Cecilia Oakley visited Hong Kong in February as an examiner for the Royal College of Physicians. She met with a number of the ICSM Council members during her stay, and provided valuable advice on the development of the Institute towards an Area of Excellence.

ICSM on the web

A web site was set up for the Institute, in order to disseminate up-to-date information on the Institute's activities and publications to both members and non-members. The web site address is http://www.hku.hk/facmed/icsm.

ICSM on TV

Professors T.M. Wong and C.P. Lau were interviewed in February by TVB about calcium-channel-blocking Chinese herbs for the evening news.

EDUCATION

ICSM members are already strongly committed to medical education. At the undergraduate level, we make up one half of the CVS module planning group, including the Coordinator, and many more of our members provide expert advice in the planning of the CVS tutorial cases. At the postgraduate level, our members are responsible for the core curriculum in cardiology. We also contribute extensively to the training of research postgraduates: at present, 28 research postgraduate students are formally affiliated to the ICSM. The close collaboration between both scientists and clinicians in the cardiovascular field provides a broad-based background to their training, and our on-going programme of seminars and informal workshops provides a stimulating research environment.
**ICSM Publications in 1999**

Proceedings of the Third Annual Scientific Meeting of the ICSM “Bridging Cardiovascular Science and Medicine” were published in the Journal of the Hong Kong College of Cardiology, Volume 7, No. 2, which appeared in October 1999.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes mellitus is associated with hyperreactivity of smooth muscle cells due to altered subcellular Ca$^{2+}$ distribution in the human uterine artery.</td>
<td>Wolfgang F. Graier.</td>
<td>124</td>
</tr>
<tr>
<td>The problems in the use of herbal and natural sustances, with specific example concerning the cardiovascular system.</td>
<td>Peter Pang, Christina Benishin, Richard Lewanozuk, and Jacqueline Shan.</td>
<td>124</td>
</tr>
<tr>
<td>Heart valve replacement surgery: past, present and future.</td>
<td>Albert Starr</td>
<td>125</td>
</tr>
<tr>
<td>A new strategy in the treatment of heart failure – results from the MERIT-HF trial.</td>
<td>Finn Waagstein</td>
<td>125</td>
</tr>
<tr>
<td>Inhibition of stress-activated protein kinase by magnesium tanshinoate (MTB) in isolated rat heart.</td>
<td>Kathy K.W. Au Yeung and Y.L. Siow.</td>
<td>126</td>
</tr>
<tr>
<td>Nitric oxide inhibits vasodilation caused by cAMP-dependent agonists or muscle contractions in the dog skeletal muscle circulation.</td>
<td>H.J. Ballard, X. Ma and F.M. Mo.</td>
<td>126</td>
</tr>
<tr>
<td>The role of protein kinase c and phosphodiesterase on cyclic AMP accumulation upon κ-opioid receptor stimulation in rat ventricular myocytes.</td>
<td>J. S. Bian and T.M. Wong</td>
<td>126</td>
</tr>
<tr>
<td>Inhibitory effects of 17β-estradiol on vasoconstriction.</td>
<td>H.Y. Chan, F.L. Chan, X.Q. Yao, Y. Huang.</td>
<td>126</td>
</tr>
<tr>
<td>Effects of β3-adrenoceptor activation in isolated pulmonary artery and aorta of spontaneously hypertensive and WISTAR-KYOTO rats.</td>
<td>S.W. Chan, Y.M. Ho, Y.K. Chin and Y.W. Kwan.</td>
<td>127</td>
</tr>
<tr>
<td>Vasodilating effects of pranidipine on isolated pulmonary</td>
<td>S.W. Chan, M.K. Law, K.Y.</td>
<td>127</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>artery and aorta of spontaneously hypertensive and WISTAR-KYOTO rats.</td>
<td>Hung and Y.W. Kwan.</td>
<td>127</td>
</tr>
<tr>
<td>Long term effects of cardiac rehabilitation programme on the quality of life of patients after myocardial infarction or coronary angioplasty.</td>
<td>J Chau, CM Yu, BMY Cheung, S McGhee, KB Lam, YM Fong, YY Ho, LSW Li, CP Lau.</td>
<td>128</td>
</tr>
<tr>
<td>Expression and cloning of CNG1 channel in vascular endothelial cells.</td>
<td>Cheng Chin-Hung, Kwan Hiu-Yee, Huang Yu, Yao Xiao-Qiang.</td>
<td>128</td>
</tr>
<tr>
<td>Frequency of angiotensin-converting enzyme genotypes in hypertensive patients with left ventricular hypertrophy.</td>
<td>BMY Cheung, RYH Leung, CP Lau.</td>
<td>128</td>
</tr>
<tr>
<td>Randomised placebo-controlled trial of the effect of fosinopril on left ventricular mass in untreated hypertensive patients.</td>
<td>BMY Cheung, SPC Ho, CP Lau.</td>
<td>128</td>
</tr>
<tr>
<td>Inhibition of inducible nitric oxide synthase expression in endothelial cells by EGB and its metabolites.</td>
<td>F. Cheung, W.K. Mak, Y.L. Siow and Karmin O.</td>
<td>128</td>
</tr>
<tr>
<td>Fetal growth and early postnatal growth are related to blood pressure in adults.</td>
<td>Y.B. Cheung,¹ L. Low, C. Osmond, D. Barker, J. Karlberg.</td>
<td>129</td>
</tr>
<tr>
<td>Occlusion of native and residual arterial ducts by different types of coils.</td>
<td>Y.F. Cheung, M.P. Leung, K.T. Chau, T.C. Yung.</td>
<td>129</td>
</tr>
<tr>
<td>Effect of chronic hypoxia on endothelin receptors of isolated pulmonary arteries of rats.</td>
<td>R. Das, M.L. Fung and H.J. Ballard.</td>
<td>129</td>
</tr>
<tr>
<td>How to make use of MIDCAB, and OFF and ON PUMP CABG on the beating heart.</td>
<td>Toshihiro Fujimatsu, Shuichi Komiyama, Kouichi Hayashi, Hiroyuki Suzuki.</td>
<td>130</td>
</tr>
</tbody>
</table>
Reduced EDHF-mediated relaxation of the coronary microarteries in coronary artery disease.  

Zhi-Dong Ge, Shui-Wah Chiu and Guo-Wei He.  

Coronary artery bypass grafting: towards the new millennium.  

Guo-Wei He.  

Age and gender dependent impact of childhood obesity on blood pressure.  

Qing He, Zong Yi Ding, Daniel Yee Tak Fong, Johan Karlberg.  

Oxygen uptake and heart rate responses during tai chi in patients with cardiovascular disease and normal subjects.  

Y.L. Ho, C.M. Yu, L.S.W. Li, E. So, M.L. Chan, L. Chan, C.P. Lau.  

Arterial relaxation induced by purified green tea (-)epicatechin: role of endothelium.  

Yu Huang, XQ Yao, CW Lau, FL Chan & ZY Chen.  

Inhibitory effects of BAICALEIN and BAICALIN on endothelium-dependent vasorelaxation.  

Yu Huang, SY Tsang, CW Lau, WI Law, YL Su, and ZY Chen.  

Opposite effects of glibenclamide and tolbutamide on contractility of rat arteries.  


Is the mechanism of K⁺-induced contraction in normal physiological salt solution (PSS) and in Ca²⁺-, Mg²⁺-free medium containing EDTA similar?  

G.M.Kravtsov and G.W.He.  

Interaction of dietary guar gum with β-blockers.  

CR Kumana, MMY Chan, M Kou and JTC Ma.  


Kwan DCY, Das R, Ballard H, Cheah LS, Gwee MCE and Daniel EE.  

Atypical β-adrenoceptor-mediated inhibition of L-type calcium channel current of guinea-pig single ventricular myocytes.  

Y.W. Kwan and Alice L.S. Au.  

Modulation by extracellular ATP of delayed rectifier K⁺ channels of guinea-pig single sinoatrial nodal cell.  

Y.W. Kwan and Iris C.P. Lau.
Upregulation of macrophage migration inhibitory factor (MIF) in neointimal formation after carotid balloon injury in rats. H.Y. Lan, X.R. Huang, R. Morishita, T. Ogihara, C.P. Lau. 133


Changes of plasma F$_{1+2}$ and D-dimer levels in patients with lowintensity anticoagulation after mechanical valve replacement. Baojun Li, Zhinong Wang, PhD, Baoren Zhang, Jialin Zhu, Ju Mei. 133

Effects of cardiac functional status and atrial fibrillation on activity of coagulation in patients with oral anticoagulant after mechanical valve replacement. Baojun Li, Baoren Zhang, Jialin Zhu, Ju Mei, Zhinong Wang. 134

Age affects blood pressure and heart rate following IV diazepam. N Li, CR Kumana, BMY Cheung, ST Fan, CL Liu. 134

Clinical study of treating viral myocarditis with combination of YU DAN RONG XIN WAN and ASTRAGALE. Guocai Liang. 134

The differences of endothelium-derived hyperpolarizing factor (EDHF)-mediated hyperpolarization in human internal mammary artery (IMA) and saphenous vein (SV). Zhi-gang Liu and Guo-wei He. 134

Surgical preparation of saphenous vein abolishes nitric oxide release in the vein. Zhi-gang Liu, Xiao-cheng Liu, and Guo-wei He. 135

Left ventricular volume reduction surgery using rat ischemic cardiomyopathy model. T. Nishina, S. Yuasa, K. Nishimura, S. Miwa, Y. Sakakibara, M. Komeda. 135

Current strategies toward better long-term outcome in coronary artery bypass grafting: 7 years experience in nippon medical school. Masami Ochi & Shigeo Tanaka. 135

Attenuated intracellular Ca$^{2+}$ response to β-adrenoceptor stimulation is due to conversion of a 45KDa Gso isoform to a 52KDa Gs$\alpha$ isoform in the heart of chronically hypoxic rat. J-M Pei, X-C Yu, ML Fung, CS Cheung, MP Leung, NS Wong and TM Wong. 135
A novel impeller pump for long-term circulation support. KX Qian, P Zheng, WM Ru, HY Yan, ZG Feng, L Li.

A simplified questionnaire on quality of life assessment of patients undergoing coronary artery bypass grafting. WS Suen, SW Chiu, DLC Cheung, JWT Lee, and GW He.

Comparison of operative mortality and morbidities of double valve versus mitral valve replacement. WS Suen, SW Chiu, DLC Cheung, JWT Lee, and GW He.

Several challenging aspects in valvular replacement. Sun Pei-wu.

The release of adrenomedullin from the heart is increased in rats with renovascular hypertension. F. Tang and I.S.S. Hwang.

Clinical features and coronary heart disease risk in hong kong chinese with familial hypercholesterolaemia Brian Tomlinson, Wei Lan, Chi-Pui Pang.

The role of local angiotensin II and its receptor on the pathogenesis of diabetic cardiomyopathy. Wang GuoHong Yuan ShenYuan Bian YanTao.

Clinical predictors of prognosis in patients with ischemic heart disease who underwent cardiac rehabilitation - the importance of diabetes mellitus and exercise. Wang X.L., C.M. Yu, L.S.W. Li, B.M.Y. Cheung, Y.M. Fong, Y.Y. Ho, K.B. Lam, W. Ng, C.P. Lau.


Myocardial expressions of endogenous opioid peptides in rheumatic heart disease and their effects on cardiac performance. Zhi-Nong Wang, Bao-Ren Zhang, Jia-Lin Zhu, Jia-Hua Hao.

Comparison of experimental efficacy between two methods of transmyocardial laser revascularization. Z.Y. Yan, H.Lei, C.Fan, B.L. Rong, H.He and E.G. Wu.

Thirty-eight cases of minimally invasive cardiac operations. Z.Y. Yan, H.Lei, Y.J. Wu and E.G. Wu.
Assessment of left atrial and ventricular function by acoustic quantification.

H Yang, C M Yu, P Y Lee, Y M Lam, Q Wang, S Y Chiu, C P Lau.

Recording of a mechanosensitive Ca\textsuperscript{2+}-permeable channel in vascular endothelial cells.

X. Yao, HY. Kwan, Y Huang.

Comparison of Valsartan and Fosinopril in the suppression of myocardial fibrosis and matrix cellular infiltration in rats after acute myocardial infarction.


Toward more scientific evaluation of partial left ventriculectomy (BATISTA operation) using dilated cardiomyopathy model.

S. Yuasa, T. Nishina, S. Miwa, Y. Sakakibara, K. Nishimura, M. Komeda.

Outcome of neonates with congenital heart block.

Yung TC, Leung MP, Chau AKT, Lee SL.

Surgical intervention of complex endocarditis.

Bao-Ren Zhang, Zhi-Nong Wang, Jia-Lin Zhu, Jia-Hua Hao.

Viability studies of neonate cryopreserved allograft valved conduit.

Zhang Rongzhen and Zhao Xiwu.

Minimally invasive mitral and aortic valve replacement - the ministeronotomy approach.

Xi Zhang, Zhi- Ping Wang, Jian- Ping Yao, Guo-Yong Wu, Yong Gu.

Attenuated [Ca\textsuperscript{2+}] and [pH] responses to \kappa-opioid receptor stimulation in the heart of rats subjected to chronic hypoxia.

J-M Pei, J-S Bian, X-C Yu, ML Fung and TM Wong.
Publications of ICSM Members in 1999


Cheung BMY, Leung R, Shiu S, Tan KCB, Lau CP, Kumana CR. HpaII Polymorphism in the Atrial


Fung M-L, Corning MDR, and Haddad GG. Sodium homeostasis in rat hippocampal slices during oxygen and glucose deprivation: Role of voltage-sensitive sodium channels. Neuroscience Letters, 275


He GW. Coronary endothelial function in cardiac surgery. Clinical and Experimental Pharmacology and Physiolo (in press).


Ho SY, Lam TH, Hedley AJ and Mak KH. Interviewing in Hong Kong death registries to obtain data on smoking and mortality. Nicotine & Tobacco Research 1: 192-3 (1999).


Kumana CR, Cheung BMY and Lauder IJ. Impact of statins in different circumstances. Journal of

Kumana CR, Ching PTY, Cheung E, Kong Y, Kou M, Chan CK, Chu KM, Seto WH and Lam SK.
Antiulcer Drug Prescribing in Hospital successfully influenced by "Immediate Concurrent Feedback".

Kwan CY. Heterogeneity of vascular smooth muscle $\alpha_{1}$-adrenoceptors in canine blood vessels.

Kwan CY. Membrane abnormalities of vascular smooth muscle of mesenteric arteries of

Kwan CY. The Effects of different ginseng extracts on vascular contraction in vitro: evidence for Yin-

Kwan CY and Kwan TK. Dynamic digital fluorescence ratio imaging of cell calcium in vascular

Kwan CY and Kwan TK. The in vitro effects of Panax notoginseng saponins on vascular endothelial

Kwan CY, Ma MF, and Hui SCG. Inhibition of endothelium-dependent vascular relaxation by

Kwan CY and Zheng XF. Cyclopiazonic acid inhibits Ca$^{2+}$ sequestration by SR and activates Ca$^{2+}$
influx via nifedipine-sensitive Ca$^{2+}$ channels in rat tail artery. Biomedical Research 10: 121-125
(1999).

Kwan YW, To KW, Lau WM and Tsang SH. Comparison of the vascular relaxant effects of ATP-
dependent K$^+$ channel openers on aorta and pulmonary artery isolated from spontaneously

Lai J-H, Ho L-J, Kwan CY, Chang DM and Lee TC. Plant alkaloid tetrandrine and its analogues block
CD28-costimulated activities of human peripheral blood T cells: potential immunosuppresants in

Lam C, Leung SK, Lau CP, Tse HF and Ayers GM. Improved efficacy of mode switching during
atrial fibrillation using automatic atrial sensitivity adjustment. Pacing and Clinical Electrophysiology 22:

Lam TH and Hedley AJ. Environmental tobacco smoke in Asia: slow progress against great


Lau CP and Kumana CR. Fenfluramine Phentermin Valvulopathy: Fact or Coincidence? Medical Progress 26: 5-7 (1999) with permission from the Journal of the Hong Kong College of Cardiology.


Nag S, Yee B and Tang F. Reduction in somatostatin and substance P levels and choline acetyltransferase activity in the cortex and hippocampus of the rat after chronic intracerebroventricular...


Pang FC, Wan SH and Lau CP. A lady with dyspnoea for 2 days. The Hong Kong Practitioner. 21(9): 435-7 (1999).


Strickberger SA, Tokano T, Tse HF, Kim MH, Oral H, Flemming M, Pelosi F, Michaud GF, Knight BP, Goyal R and Morady F. Target temperatures of 48 degrees C versus 60 degrees C during slow


Teoh H, Leung SWS, Quan A, Hung M, Man GSK and Man RYK. Acetylcholine-mediated relaxation in rat thoracic aorta is enhanced following acute exposure to physiological concentrations of 17β-estradiol. Molecular and Cellular Biochemistry (in press).


Tse HF and Lau CP. Implantable atrial defibrillators. CEPR (in press)


Tse HF, Lau CP and Ayers GM. Long term outcome in patients with chronic atrial fibrillation after


Yu CM, Lau CP, Cheung BMY, Fong YM, Ho YY, Lam KB and Li LSW. Clinical predictors of morbidity and mortality in patients with myocardial infarction or revascularisation who underwent cardiac rehabilitation: The importance of diabetes mellitus and exercise capacity. American Journal of Cardiology (in press).

Yu CM and Sanderson JE, Different prognostic significance of right and left ventricular diastolic dysfunction in heart failure. Clinical Cardiology (in press).


Grants and donations to the Institute in 1999

The Institute was shortlisted as an Area of Distinction, and was awarded a grant of $1,272,508 for the further development of an area of excellence in cardiovascular science and medicine. The Institute also attracted donations from a number of outside companies, which were used to fund the Institute’s programme of scientific meetings in 1999.

Expenditure by the Institute in 1999

Eighty seven percent of the Institute’s total expenditure in 1999 was on research and research-related activities; around 10% of our expenditure was on the Third Annual Scientific Meeting (although this was fully funded from donations and registration fees), and only 1.9% of our expenditure was required for administrative costs.

Grants and Fellowships awarded by the Institute in 1999

$150,000 to Professor T.M. Wong and Dr. M.L. Fung, for the employment of a research assistant to carry out a collaborative research project.
$50,000 to Dr. A.K.T. Chau for a project on dobutamine stress echocardiography.
$85,000 to Dr. Karmin O for a collaborative project with U.B.C., as part of the CV-PEARL initiative.

Further research expenditure in 1999 was mainly related to grants and fellowships awarded before 1999, but only taken up during 1999.

Scientific Meetings of the Institute

All of the Institute’s scientific meetings in 1999 were fully self-funding. The expenses were met by the registration fees paid by the participants in the meetings and by donations to the Institute from companies wishing to support cardiovascular research and medicine in Hong Kong.
FUTURE AIMS

Research

Three key areas for research collaboration have already been established, and ICSM members are committed to the development of joint research projects within those foci. In the year 2000, we expect to see the following:

Inputs: An increase in the number of collaborative applications for external funding by ICSM members. The more formal grouping of our members into special interest groups, with the appointment of convenors for each topic, greatly enhances the development of collaboration in key areas. Development is further enhanced by prioritising these development areas in the distribution of Institute research funds as seed funding for collaborative work.

Outputs: An increase in the number of joint research publications from ICSM members. By now, our existing collaborative research projects are beginning to yield results, and we expect to see an upsurge in collaborative outputs.

Education

We plan to exploit the strong co-operation between cardiovascular scientists and clinicians, as well as our wealth of experience in medical education, by the development of a series of CD-ROMs entitled “From Basics to Bedside”. Each CD would deal with a specific cardiovascular problem, and would start from the underlying science, and develop the “case” through the various treatment options and potential outcomes. This integrated approach to teaching has proven benefits, and we would make the CDs available to all medical undergraduates at HKU initially, with a view to a wider distribution, perhaps through our web site, at a later date. Development of the CD series will be co-ordinated by Dr. H.J. Ballard, who also co-ordinates the CVS teaching module in the new medical curriculum. The first “Basics to Bedside” CD will be available in 2000.

Social and Economic Development

Cardiovascular Risk Factors Analysis. We plan to set up a service for the investigation of cardiovascular risk factors in patients in Hong Kong: ultimately, we would be able to address both genetic and rare biochemical factors, including for example the LDL receptor gene, familial hypercholesterolaemia, Marfan’s syndrome, the fibrillin gene and BNP. In 2000, we will establish homocysteine testing, and make it available to cardiologists throughout Hong Kong. The homocysteine research project is a collaborative research project involving members of the atherosclerosis group in the ICSM and researchers in Vancouver, through the CV-PEARL initiative. Homocysteine has been shown to be a risk factor for coronary artery disease, and susceptible individuals can be successfully treated with dietary folate. At present, however, the homocysteine assay is unavailable in Hong Kong or China. Setting-up of the homocysteine assay will be co-ordinated by ICSM Council members Dr. Bernard Cheung and Dr. Karmin O, who is the principal researcher on the Hong Kong homocysteine project and the ICSM co-ordinator of the CV-PEARL collaboration.
Hypertension Survey. Hypertension is a major preventable risk factor of heart disease. There is no data on the incidence of hypertension in the community. This is of importance in planning prevention and research. The Hypertension Research Group (Convenor Dr. Bernard Cheung) is planning for a territory-wide survey of hypertension in the year 2000: the information generated will be of major impact to the society.