



CV network

THE OFFICIAL BULLETIN OF THE INTERNATIONAL ACADEMY OF CARDIOVASCULAR SCIENCES

VOL. 1 · NO. 3 · Pages 25-36, 2002

Editorial Team

Editor:
Ivan Berkowitz

Assistant Editors:
Ian Dixon
Lorrie Kirshenbaum

Editorial Board:
Jaroslaw Barwinski
John Ducas
Otoni Gomes
Suresh Gupta
Keld Kjeldsen
Ricky Man
Peter McLennan
Dennis McNamara
Bohuslav Ostadal
Arie Pinson
Grant Pierce
Pawan Singal
Bramah Singh
Nobuakira Takeda

In This Issue

- 25 From the Vice President
- 26 Administrative Structure
- 26 Official Journals
- 27 Academy Establishes Medals of Merit
- 27 Michael DeBakey Honoured
- 28 Richard Bing Honoured
- 29 Announcement of 223 Fellows
- 31 Remembering Someone Special
- 31 Advances in Heart Health
- 33 News & Views
- 34 History of Academy Meetings
- 35 Conference Calendar
- 36 Mission Statement and Objectives

From The Vice President



Dr. Norman Alpert

This has been an extraordinary era of accomplishments in bio-medical research and the translation of those findings to the bedside. It is astonishing to realize that it was only a half century ago that the mystery of DNA was unraveled providing a mechanistic understanding of how proteins are coded. More recently the human genome was deciphered; the proteome is being investigated and genes associated with specific diseases have been identified. Gene therapy is in the preliminary phases of investigation.

Advances in the management of cardiovascular disease paralleled these developments. Although coronary artery disease remains a major problem, thrombolytic therapy, angioplasty and the use of statins resulted in dramatic improvements. The modern medical management of heart failure increased the quality of life while decreasing mortality. Electrophysiological, medical and surgical treatment of arrhythmia reduced lethality.

Voltaire's ever-optimistic character Candide would certainly claim "THIS IS THE BEST OF ALL POSSIBLE WORLDS". But as Candide found out, life, even enlightened life, was not without its serious problems.

Despite the marvelous advances made during the past half century and the translation of these to the clinic, heart disease remains the number one cause of mortality and morbidity for men as well as for women.

As developing countries have reduced the toll of infectious diseases, cardiovascular disease has become the major cause of mortality there as well. Societies through out the world are involved in efforts to make the notable advances in cardiovascular medicine available to more of their citizens. The Academy has played an important role in sponsoring prestigious scientific meetings, where the newest advances are presented, and shared with the scientific and medical community. These activities are important but not sufficient.

The Academy must play a more direct role in reducing the mortality rates seen in Table 1. A key missions of the Academy is "To increase public awareness with respect to cardiovascular health and disease by a) making the general public aware of the cardiovascular risk factors through public forums, lectures, seminars and the media and b) cooperating with governmental, public and private agencies concerned with improving cardiovascular health and preventing cardiovascular disease.

We know that many of the risk factors leading to car-

continued on page 26

Table 1 Heart Disease Death Rates per 100,000 for males and females.

Gender/Age	25-34	35-44	45-54	55-64	65-74	75-84	>85
Female	5.1	16.8	66.7	237.0	685.6	2122.4	6810.1
Male	11.3	52.2	199.8	584.7	1358.1	3239.1	7830.9

EDITORIAL OFFICE: Institute of Cardiovascular Sciences, St. Boniface General Hospital Research Centre, Faculty of Medicine, University of Manitoba
3006 - 351 Taché Avenue, Winnipeg, Manitoba R2H 2A6 Canada · Tel: (204) 228-3193 · Fax: (204) 233-6723
e-mail the Editor: ivan@mts.net · Academy web site: www.heartacademy.org

diovascular disease are silent, controllable but often ignored. These include 1) hypertension, 2) high blood cholesterol, high LDL/cholesterol ratios, 3) obesity, 4) diabetes, 5) smoking, 6) an exercise free life style. A concerted effort must be made to inform the lay public and their physicians about the seriousness of these risks and the remedies that are at hand. Changing behavior is not a simple task. It will involve the concerted effort of the public health officials, the physicians and psychol-

ogists who are experts in behavior modification as well as members of the private sector.

The International Academy of Cardiovascular Sciences is in a unique position to coordinate these activities. Our strength resides in the worldwide membership of the Academy and their strong commitment to its missions. Success in this activity will require the commitment of all members of the Academy in developing a practical plan for implementation and the seeking of external funding to

carry out the plan. An essential ingredient of such a plan is the identification of a set of measurable goals so that progress or the lack thereof can be assessed. With these activities, Candide might eventually say "THIS IS THE BEST POSSIBLE WORLD FOR THOSE WHO MIGHT SUCCUMB TO CARDIOVASCULAR DISEASE"



ADMINISTRATIVE STRUCTURE OF THE INTERNATIONAL ACADEMY OF CARDIOVASCULAR SCIENCES

President

Howard Morgan, Winfield, USA

Vice President

Stephen Vatner, Newark, USA

Vice President

Norman Alpert, Burlington, USA

Chairman, Board of Directors

Makoto Nagano, Tokyo, Japan

Executive Director and CEO

Naranjan S. Dhalla, Winnipeg, Canada

Director of Finance

Nobuakira Takeda, Tokyo, Japan

Director of Education

Pawan K. Singal, Winnipeg, Canada

Director of Scientific Affairs

Grant N. Pierce, Winnipeg, Canada

Director of Corporate Affairs

Ian M. C. Dixon, Winnipeg, Canada

Director of Public Affairs

Lorrie A. Kirshenbaum, Winnipeg, Canada

Director of Development

Ivan Berkowitz, Winnipeg, Canada

Administrative Assistant

Susan Zettler, Winnipeg, Canada

Official Journals of the International Academy of Cardiovascular Sciences

1) EXPERIMENTAL & CLINICAL CARDIOLOGY (Editor: Dr. B. Ostadal)



- An international, peer review journal covering all aspects of cardiology from basic science to clinical trials and reviews.
- An internationally renowned editorial board comprising leading experi-

mental and clinical cardiologists from Europe, North America and around the world provides direction to the journal.

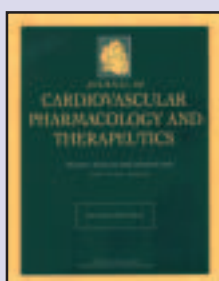
For more info please visit the site of the publisher:

PULSUS GROUP:
<http://www.pulsus.com/ecc>

To contact the editor:

Professor MUDr. B. Ostadal, DrSc
Telephone: 420 2 4106 2553;
Fax: 420 2 4106 2125
Email: ostadal@biomed.cas.cz

2) JOURNAL of CARDIOVASCULAR PHARMACOLOGY & THERAPEUTICS



- (Editor: Dr. B. Singh)
- Published four times a year, this focuses on critical evaluation and discussion of pharmacologic and therapeutic advances in the treatment of cardiovascular disease.

For details, please contact the publisher:

WESTMINSTER PUBLICATIONS
Telephone: (516) 759 0025
Fax: (516) 759 5524
E-mail: timothymclaughlin@westminster-publications.com
Web Site:
<http://www.westminsterpublications.com>

To contact the editor:

Dr. Bramah Singh
Telephone: 310 268 3646;
Fax: 310 268 4288
Email: bsingh@ucla.edu

3) THE LATIN AMERICAN ARCHIVES OF CARDIOVASCULAR SCIENCES



- (Executive Editor: Dr. O. Gomes)
IACS South American Section has acknowledged its official publication.

For subscription details, please visit:

<http://www.servicor.com.br/ishr/revista/001/edicao%20vol2.htm>

To submit editorial material or for details, please contact:

Executive Editor: Otoni M. Gomes MD, FIACS
Address: Rua José do Patrocínio, 522 - Bairro Santa Mônica, Belo Horizonte - MG, Brazil CEP 31525 - 160
Tel / Fax: 55 - 31 - 34427488
Email: servicor@servicor.com.br

Academy Establishes Medals of Merit

by Ivan Berkowitz · Winnipeg, Canada

The International Academy of Cardiovascular Sciences will honour extraordinary people with Medals of Merit. They will be recognized for making important original research discoveries that clearly stand on their own or contributing important educational initiatives that have influenced how cardiovascular science is learned and practiced. Persons whose work explores in greater depth initial observations or educational initiatives of others will not be qualified for the Medal even if the research work is published in hundreds of papers or secondary journals or specialized books. Officers of the Academy will be excluded from consideration of the Medal.

PEOPLE AND PLACES



Academy Honours Michael E. DeBakey

by Pawan K. Singal · Winnipeg, Canada

Dr. Michael DeBakey was recently made a Fellow of the International Academy of Cardiovascular Sciences. In Winnipeg, at Cardiovascular Awards Day hosted by the Institute of Cardiovascular Sciences on October 1, 2002, he will be recognized for his extraordinary lifetime achievements with the Medal of Merit from the Academy.

A native Louisianan, Dr. DeBakey received his undergraduate and medical education at Tulane. After his residency at Charity Hospital in New Orleans, he went to the Universities of Strasbourg and Heidelberg for further study. Returning to Tulane Medical School, he served on the surgical faculty from 1937 to 1948. From 1942 to 1946, he was on military leave, serving in the Office of Surgeon General as director of the Surgical Consultants' Division and led the development of mobile army surgical hospitals (MASH units). He joined the Baylor faculty in 1948, serving as Chairman of the Department of Surgery until 1993. Dr. DeBakey was president of the college from 1969 to 1979 and served as Chancellor from 1979 to January 1996.

Dr. DeBakey is Chancellor Emeritus, Distinguished Service Professor and Olga Keith Wiess Professor of Surgery, and Director of the DeBakey Heart Center of the Baylor College of Medicine and the Methodist Hospital in Houston, Texas. Dr. DeBakey's surgical career has earned him world renown as a surgeon, innovator, medical educator, and international medical

statesman. He has performed more than 60,000 cardiovascular procedures and has trained thousands of surgeons who practice throughout the world, many now as heads of their own departments of surgery. He has operated on heads of state, princes and celebrities, as well as paupers, and applies the same exacting surgical technique and compassion to all.

While still a medical student, he devised a pump that years later became one of the essential components of the heart-lung machine that made open-heart surgery possible. He has developed more than 50 surgical instruments.

Best known for his innovations in treating cardiovascular diseases, Dr. DeBakey was the first to do successful excision and graft replacement of arterial aneurysms and obstructive lesions, particularly on the carotid artery and aortic arch. A pioneer in the development of an artificial heart, he was the first to use a heart pump successfully in a patient. He also conceived the idea of lining a bypass pump and its connections with Dacron velour.

In 1953, Dr. DeBakey performed the first successful carotid endarterectomy, thereby establishing the field of surgery for strokes. In 1964, Dr. DeBakey and associates performed the first aortocoronary bypass with autogenous saphenous vein graft. In 1968, he led a team of surgeons in an historic multiple transplantation procedure in which the heart, kidneys, and one lung of a donor were

transplanted to four recipients.

His ability to bring his professional knowledge to bear on public policy earned Dr. DeBakey a reputation as a medical statesman. He was a member of the medical advisory committee of the Hoover Commission and was chairman of the President's Commission on Heart Disease, Cancer and Stroke during the Johnson Administration. He has worked tirelessly in numerous capacities to improve national and international standards of health care. Among his numerous consultative appointments is a three-year membership on the National Advisory Heart and Lung Council of the National Institutes of Health.

Dr. DeBakey holds membership and fellowship in the most distinguished medical and surgical societies in the world. A life-long scholar, he has published more than 1,300 medical articles, chapters, and books on various aspects of surgery, medicine, health, medical research, medical ethics and socioeconomics, and education.

Dr. DeBakey is the recipient of numerous honorary degrees and citations from universities around the world. He has received honours from many heads of state, including the Medal of Freedom, the highest honour the President of the United States can bestow on a civilian, the Presidential Medal of Science, and the Lasker Award, the American equivalent of the Nobel Prize.





Academy Honours Richard J. Bing

by Pawan K. Singal · Winnipeg, Canada

The International Academy of Cardiovascular Sciences is honoured to announce that Dr. Richard J. Bing has accepted appointment as a Fellow of the Academy.

Dr. Bing is also being recognized for his extraordinary lifetime achievements with the Medal of Merit from the Academy.


Dr. Bing was born in Nurnberg, Bavaria and is a U.S. citizen. After graduation with M.D.'s from the Universities of Munich and Bern, he chose to work on the culture of whole organs at the Rockefeller Institute in New York with Alexis Carrel, the surgeon who had won a Nobel Prize, and Charles Lindbergh, the "Lone Eagle" who made the famous solo flight to Paris in 1929 and was attracted to medical research where he made important contributions. After an internship in surgery at Columbia University, Dr. Bing worked for six years in physiology, first at Columbia and later at New York University, studying the mechanism of hypertension and of crush injuries. He then joined the staff of the Department of Medicine at Johns Hopkins as an instructor where he worked on neuro-genic hypertension and also became a resident in medicine. After one year, he joined

the U.S. Army, the chemical warfare division, studying the mechanisms of action of various agents. Dr. Bing then rejoined the Department of Surgery at Johns Hopkins Hospital to work with Alfred Blalock and Helen Taussig on congenital heart disease.

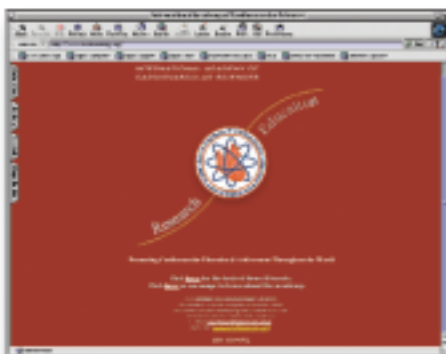
After eight years, he joined the University of Alabama, working on the metabolism of the heart. He further pursued this subject as a Professor of Medicine at Washington University, in St. Louis, and as director of the Veterans Administration Medical Service. In 1959, Dr. Bing became Chairman of the Department of Medicine at Wayne State University in Detroit, where he continued his studies in cardiac metabolism, and also began work on the feasibility of coincidence counting and the measurement of coronary flow and visualization of the heart in situ. Ten years later, he moved to Pasadena, California as Professor of Medicine at USC and Chief of Medicine and Cardiology at the Huntington Memorial Hospital, and as Director of Experimental Cardiology at Huntington Medical Research Institutes. His initiative focused on new methods of visualizing the coronary microcirculation by transillumination and the metabolism of the

heart after myocardial infarction. He is now working on the mechanism of the COX-2 enzyme in the kidney and heart, and its inhibition by non-steroidal anti-inflammatory drugs.

Dr. Bing has been awarded honorary degrees by the German Academy of Medicine, University of Bologna, and Johns Hopkins University. In recognition of Dr. Bing's contribution as a founder, the International Society for Heart Research instituted the "Richard Bing Award for the Best Young Investigator in the Field of Heart Research". In 2001, he received the Presidential Citation of the American College of Cardiology.

Dr. Bing has often expressed that he has a good time doing his work and wishes that it could last forever. In addition to medicine, he is addicted to music which, he says, has given him the opportunity to weather the vicissitudes of life. 

Visit Us At:



www.heartacademy.org



The International Academy of Cardiovascular Sciences takes special pride in announcing the following 223 Fellows of the Academy:

- Dr. Norman Alpert, Burlington, USA
 Dr. Giuseppe Ambrosio, Perugia, Italy
 Dr. Inder Anand, Minneapolis, USA
 Dr. Aubie Angel, Winnipeg, Canada
 Dr. James A. Angus, Victoria, Australia
 Dr. Piero Anversa, Valhalla, USA
 Dr. Paul W. Armstrong, Edmonton, Canada
 Dr. Richard J. Bing, Pasadena, USA
 Dr. Sanford P. Bishop, Birmingham, USA
 Dr. Colin M. Bloor, La Jolla, USA
 Dr. Roberto Bolli, Louisville, USA
 Dr. Domingo M. Braille, Sao Jose do Rio Preto, Brazil
 Dr. David P. Brasil, Belo Horizonte, Brazil
 Dr. Eugene Braunwald, Boston, USA
 Dr. Pavel Braveny, Brno, Czech Republic
 Dr. Dirk L.E. Brutsaert, Edegum, Belgium
 Dr. L. Maximilian Buja, Houston, USA
 Dr. John A. Cairns, Vancouver, Canada
 Dr. Claudio M. Caldarera, Bologna, Italy
 Dr. Ernesto Carafoli, Padova, Italy
 Dr. Edward E. Carmeliet, Leuven, Belgium
 Dr. James B. Caulfield, Birmingham, USA
 Dr. Suphachai Chaithiraphan, Bangkok, Thailand
 Dr. Kanu Chatterjee, San Francisco, USA
 Dr. Eugene I. Chazov, Moscow, Russia
 Dr. Horacio Cingolani, La Plata, Argentina
 Dr. Richard A. Cohen, San Francisco, USA
 Dr. Jay N. Cohn, Minneapolis, USA
 Dr. Dipak K. Das, Farmington, USA
 Dr. Prasun K. Das, Meerut, India
 Dr. Jean Davignon, Montreal, Canada
 Dr. Michael E. DeBakey, Houston, USA
 Dr. Adolfo J. de Bold, Ottawa, Canada
 Dr. Jacques de Champlain, Montreal, Canada
 Dr. Prakash C. Deedwania, Fresno, USA
 Dr. Walmor C. De Mello, San Juan, Puerto Rico
 Dr. Naranjan S. Dhalla, Winnipeg, Canada
 Dr. Wolfgang H. Dillmann, La Jolla, USA
 Dr. Paolo Di Nardo, Rome, Italy
 Dr. Raul Domenech, Casilla, Chile
 Dr. James M. Downey, Mobile, USA
 Dr. Setsuro Ebashi, Okazaki, Japan
 Dr. David A. Eisner, Manchester, England
 Dr. Masao Endoh, Yamagata-shi, Japan
 Dr. Mark L. Entman, Houston, USA
 Dr. Edgardo Escobar, Santiago, Chile
 Dr. Wafia Eteiba, Cairo, Egypt
 Dr. Alexandre Fabiato, Richmond, USA
 Dr. Carlos M. Ferrario, Winston-Salem, USA
 Dr. Wagner C. Pádua Filho, Belo Horizonte, Brazil
 Dr. Luis E. Folle, Montevideo, Uruguay
 Dr. Gary S. Francis, Cleveland, USA
 Dr. Jean-Charles Fruchart, Calmette Lille, France
 Dr. Nirmal K. Ganguly, New Delhi, India
 Dr. Pallab K. Ganguly, Manama, Bahrain
 Dr. Detlev Ganten, Berlin-Buch, Germany
 Dr. Keith D. Garlid, Beaverton, USA
 Dr. Junbo Ge, Shanghai, China
 Dr. Ricardo J. Gelpi, Buenos Aires, Argentina
 Dr. Sidney Goldstein, Detroit, USA
 Dr. Otoni M. Gomes, Belo Horizonte, Brazil
 Dr. Ramesh K. Goyal, Ahmedabad, India
 Dr. Sigmundur Gudbjarnason, Reykjavik, Iceland
 Dr. Suresh K. Gupta, New Delhi, India
 Dr. Pavel Hamet, Montreal, Canada
 Dr. Qi-de Han, Beijing, China
 Dr. Gerd Hasenfuss, Göttingen, Germany
 Dr. Neils Haugaard, Philadelphia, USA
 Dr. Michael L. Hess, Richmond, USA
 Dr. Masayasu Hiraoka, Tokyo, Japan
 Dr. Norman K. Hollenberg, Boston, USA
 Dr. Bruce J. Holub, Guelph, Canada
 Dr. Rutai Hui, Beijing, China
 Dr. M. Mohsen Ibrahim, Cairo, Egypt
 Dr. Issei Imanaga, Fukuoka, Japan
 Dr. Ruthard Jacob, Tübingen, Germany
 Dr. Joseph S. Janicki, Auburn, USA
 Dr. Michiel J. Janse, Amsterdam, The Netherlands
 Dr. Robert B. Jennings, Durham, USA
 Dr. Jasbir S. Juggi, Safat, Kuwait
 Dr. Hanjörg Just, Freiburg, Germany
 Dr. Philip J. Kadowitz, New Orleans, USA
 Dr. Sérgio E. Kaiser, Rio de Janeiro, Brazil
 Dr. Hideo Kanaide, Fukuoka, Japan
 Dr. Sjukri Karim, Jakarta Barat, Indonesia
 Dr. Arnold Katz, Norwich, USA
 Dr. Hideaki Kawaguchi, Sapporo, Japan
 Dr. Wilbert J. Keon, Ottawa, Canada
 Dr. Gania Kessler-Icekson, Tikva, Israel
 Dr. Keld Kjeldsen, Copenhagen, Denmark
 Dr. Robert A. Kloner, Los Angeles, USA
 Dr. Frantisek Kolbel, Prague, Czech Republic
 Dr. Borivoj Korecky, Ottawa, Canada
 Dr. Evangelia G. Kranias, Cincinnati, USA
 Dr. Ernst-Georg Krause, Berlin, Germany
 Dr. Satoshi Kurihara, Tokyo, Japan
 Dr. Antonio L'Abbate, Pisa, Italy
 Dr. Edward G. Lakatta, Baltimore, USA

Dr. Jos M.J. Lamers, Rotterdam, The Netherlands

Dr. Glenn A. Langer, Little River, USA

Dr. Frans H.H. Leenen, Ottawa, Canada

Dr. Robert J. Lefkowitz, Durham, USA

Dr. Bernard Lévy, Paris, France

Dr. Bohdan Lewartowski, Warsaw, Poland

Dr. Martin M. LeWinter, Burlington, USA

Dr. Depei Liu, Beijing, China

Dr. Guoqing Liu, Beijing, China

Dr. Peter P. Liu, Toronto, Canada

Dr. Amanda Lochner, Tygerberg, South Africa

Dr. Thomas F. Lüscher, Zurich, Switzerland

Dr. Bernard Maisch, Marburg, Germany

Dr. Naoki Makino, Beppu, Japan

Dr. Ricky Y.K. Man, Hong Kong

Dr. Douglas L. Mann, Houston, USA

Dr. Mordechai Manoach, Tel Aviv, Israel

Dr. Mario F. De Camargo Maranhão, Curitiba, Brazil

Dr. Bruce McManus, Vancouver, Canada

Dr. Dennis B. McNamara, New Orleans, USA

Dr. John H. McNeill, Vancouver, Canada

Dr. Jawahar L. Mehta, Little Rock, USA

Dr. Nazir A. Memon, Hyderabad, Pakistan

Dr. Jean-Jacques Mercadier, Paris, France

Dr. Seibu Mochizuki, Tokyo, Japan

Dr. Terrence Montague, Dorval, Canada

Dr. Josef Moravec, Lyon, France

Dr. Howard Morgan, Winfield, USA

Dr. Tofy Mussivand, Ottawa, Canada

Dr. Réginald Nadeau, Montreal, Canada

Dr. Ryozo Nagai, Tokyo, Japan

Dr. Makoto Nagano, Tokyo, Japan

Dr. K. Gopal Nair, Bombay, India

Dr. Navin C. Nanda, Birmingham, USA

Dr. Raimundo M. Nascimento, Belo Horizonte, Brazil

Dr. Akinori Noma, Kyoto, Japan

Dr. Eric N. Olson, Dallas, USA

Dr. Robert E. Olson, Tampa, USA

Dr. Shunzo Onishi, Amagasaki, Japan

Dr. Juarez Ortiz, Sao Paulo, Brazil

Dr. Bohuslav Ostadal, Prague, Czech Republic

Dr. Takayuki Ozawa, Shimadashi, Japan

Dr. Rodolfo Paoletti, Milan, Italy

Dr. Julius Gy. Papp, Szeged, Hungary

Dr. James R. Parratt, Glasgow, Scotland

Dr. Grant N. Pierce, Winnipeg, Canada

Dr. Arie Pinson, Jerusalem, Israel

Dr. Bertram Pitt, Ann Arbor, USA

Dr. Philip A. Poole-Wilson, London, England

Dr. Laurentiu M. Popescu, Bucharest, Romania

Dr. Kailash Prasad, Saskatoon, Canada

Dr. Vijay K. Puri, Lucknow, India

Dr. Babeth Rabinowitz, Tel Aviv, Israel

Sir George K. Radda, London, England

Dr. Shahbudin H. Rahimtoola, Los Angeles, USA

Dr. B. Soma Raju, Hyderabad, India

Dr. Karel J. Rakusan, Ottawa, Canada

Dr. Robert Roberts, Houston, USA

Dr. Janet D. Robishaw, Danville, USA

Dr. Peter Rösen, Dusseldorf, Germany

Dr. Leonid V. Rosenshtaukh, Moscow, Russia

Dr. Elizabeth Roth, Baranya, Hungary

Dr. Heinz Rupp, Marburg, Germany

Dr. Edson A. Saad, Rio de Janeiro, Brazil

Dr. Hani N. Sabbah, Detroit, USA

Dr. Tomas A. Salerno, Miami, USA

Dr. Ismail Sallam, Cairo, Egypt

Dr. Nizal Sarraf-Zadegan, Isfahan, Iran

Dr. Shigetake Sasayama, Hamamatsu City, Japan

Dr. Jutta Schaper, Bad Nauheim, Germany

Dr. Wolfgang Schaper, Bad Nauheim, Germany

Dr. Ernesto L. Schiffrin, Montreal, Canada

Dr. Arnold Schwartz, Cincinnati, USA

Dr. Ketty Schwartz, Paris, France

Dr. Peter J. Schwartz, Pavia, Italy

Dr. Bal K. Sharma, Haryana, India

Dr. Shahryar A. Sheikh, Lahore, Pakistan

Dr. Nobuhiko Shibata, Osaka, Japan

Dr. Mohammed A.Q. Siddiqui, Brooklyn, USA

Dr. Manfred Siess, Tübingen, Germany

Dr. Pawan K. Singal, Winnipeg, Canada

Dr. Bramah N. Singh, Los Angeles, USA

Dr. Manjeet Singh, Patiala, India

Dr. Jan Slezak, Bratislava, Slovak Republic

Dr. Vladimir N. Smirnov, Moscow, Russia

Dr. Eldon R. Smith, Calgary, Canada

Dr. Hugh C. Smith, Rochester, USA

Dr. R. John Solaro, Chicago, USA

Dr. Michael J. Sole, Toronto, Canada

Dr. Andrew P. Somlyo, Charlottesville, USA

Dr. Avril V. Somlyo, Charlottesville, USA

Dr. Edmund H. Sonnenblick, Bronx, USA

Dr. Nicholas Sperelakis, Cincinnati, USA

Dr. Hiroyuki Suga, Osaka, Japan

Dr. Tsuneaki Sugimoto, Tokyo, Japan

Dr. László Szekeres, Szeged, Hungary

Dr. Heinrich Taegtmeier, Houston, USA

Dr. Nobuakira Takeda, Tokyo, Japan

Dr. Kewal K. Talwar, New Delhi, India

Dr. Chaoshu Tang, Beijing, China

Dr. Sadagopan Thanikachalam, Chennai, India

Dr. Paulo J.F. Tucci, Sao Paulo, Brazil

Dr. M. Sankaran Valiathan, Manipal, India

Dr. Paul M. Vanhoutte, Courbevoie, France

Dr. Stephen F. Vatner, Newark, USA

Dr. Ágnes Végh, Szeged, Hungary

Dr. Panangipalli Venugopal, New Delhi, India

Dr. Daniel Villarreal, Syracuse, USA

Dr. Richard A. Walsh, Cleveland, USA

Dr. Xian Wang, Beijing, China

Dr. Karl T. Weber, Memphis, USA

Dr. William B. Weglicki, Washington, USA

Dr. Myron L. Weisfeldt, Baltimore, USA

Dr. Karl Werdan, Halle (Salle), Germany

Dr. James T. Willerson, Houston, USA

Dr. Ruiping Xiao, Baltimore, USA

Sir Magdi Yacoub, London, England

Dr. Noboru Yamazaki, Hamamatsu-shi, Japan

Dr. Yoshio Yazaki, Tokyo, Japan

Dr. Salim Yusuf, Hamilton, Canada

Dr. Youyi Zhang, Beijing, China

Dr. Ding-Liang Zhu, Shanghai, China

Dr. Attila Ziegelhoffer, Bratislava, Slovak Rep.

Dr. Heinz-Gerd Zimmer, Leipzig, Germany





Ken-ichi Harumi


by Makoto Nagano, Jikei University, Tokyo, Japan

Dr. Ken-ichi Harumi was indeed one of the leaders not only in Japan but also in the world of heart health and education. The International Academy of Cardiovascular Sciences mourns his passing and salutes his lifetime of achievements.

Dr. Harumi was born May 4, 1927, in Tokyo, Japan. He graduated from Medical Faculty of University Tokyo and received MD degree in 1952 and PhD degree in 1957 from University Tokyo, where he established long-standing research collaboration with Dr. Hideo Ueda

and Dr. Tachio Kobayashi. He moved to Showa University School of Medicine in 1976 as Professor and Chairman of Department of Cardiology, Internal Medicine. In 1988 he moved to the National Hospital Nakano/Tokyo as Hospital Director. His working fields were electrophysiology, clinical electrocardiography, and especially T wave and computer analysis of electrocardiograms. He was President of the 58th Annual Meeting of the Japanese Circulation Society and the 21st International Congress of

Electrocardiology in 1994. In 2001, he chaired the 24th Annual Conference of the International Society for Computerized Electrocardiology. As an executive member of Japan Heart Foundation since 1990 and later as Vice-president of this foundation, he made great effort to contribute to the promotion of young researchers and the development of the prevention of cardiovascular diseases in Japan.

He died suddenly, May 13, 2002 of a myocardial infarction. 

Continuing Learning

by Ian M.C. Dixon, Winnipeg, Canada

A number of recent papers have caught the attention of the editorial staff in recent weeks by evidence of innovation. Although all of them appear in recent issues of Circulation, they represent trends in basic cardiovascular sciences, and some of these are briefly summarized herein.

MMP inhibition and post-MI cardiac remodeling

A growing awareness of the importance of extracellular matrix (matrix) remodeling in the pathogenesis of heart failure has occurred in recent years. Many different investigators have shown that over-deposition or inappropriate accumulation of matrix proteins are associated with the onset of myocardial dysfunction in heart failure. Despite this understanding, the contribution of those proteins that remove collagens and

other major matrix components (matrix metalloproteinases or MMPs) is less clear. A paper by Lindsey et al entitled "Selective matrix metalloproteinase inhibition reduces left ventricular remodeling but does not inhibit angiogenesis after myocardial infarction" (Circulation 2002;105:753) highlights inhibition of MMPs (but not MMP-1) as a strategy for limiting left ventricular remodeling after myocardial infarction (MI). Specifically, these investigators show that selective MMP inhibition (MMPi) was associated with attenuation of ventricular dilatation and reduced wall thinning of the infarct scar. Finally, neovascularization of the infarct scar was significantly increased in those animals receiving MMPi treatment. Thus, it would appear that MMPs are implicated in the pathogenesis of cardiovascular remodeling. The main caveat in this study is the exclusion of MMP-1 from a causal role in attenuation of remodeling due to the selectivity of the MMPi used in the study (it is

added that rats express relatively low levels of MMP-1 compared to other common mammalian species- Ed.). The current paper supports the suggestion that the role of MMP-2, 3 and 9 may factor into cardiac remodeling in post-MI hearts.

BNP gets assist from VPI in attenuating heart failure


During the first months and years after the initial cloning (i.e., in the mid-1980's) of atrial natriuretic peptide (ANP), natriuretic peptides (NP's) were cautiously regarded as putative "anti-heart failure" hormones. Since then, many studies have confirmed its upregulation timed to the onset inappropriate cardiac growth (maladaptive hypertrophy) and heart failure due to various different etiologies. Indeed, in the lexicon of current cardiology, upregulation of cardiac NP's is accepted as a standard by which to map cardiac hypertrophy. On the other hand, vasopectidase inhibitors have been recently

shown to inhibit both neutral endopeptidase (NEP) and angiotensin converting enzyme (ACE). In a recent publication by Chen et al. addressing rapid-paced dogs as an experimental model of heart failure (see "Maximizing the natriuretic peptide system in experimental heart failure: subcutaneous brain natriuretic peptide and acute vasopeptidase inhibition" in *Circulation* 2002;105:999), results are presented that extend our understanding of NP's in heart failure. They provide evidence of the beneficial cardiorenal effects of sub-cutaneous delivery of brain natriuretic peptide (BNP) in combination with vasopeptidase inhibitor treatment (VPI) led to a significant increase in cardiac output and glomerular filtration rate vs untreated or single-agent treated (i.e., either relatively high-dose BNP or VPI alone) experimental groups. This group concludes that "VPI potentiates the beneficial cardiorenal actions

of BNP in experimental CHF" and essentially provides the basis of a novel therapeutic approach in alleviation of heart failure.

Want the gene but not the virus?

We are accustomed to the clinical use of ultrasound in visualizing soft tissues as a diagnostic tool and particularly in assessment of human foetal development. One of the key benefits conferred by this methodology is its obvious lack of invasiveness or secondary pharmacological effects. At the same time, gene transfer technology has benefited enormously with the development and perfection of recombinant adenoviruses in vectoring foreign DNA to cells. One of the drawbacks of this technology lies in the introduction of viral DNA to the genomes of the target cells, and safety issues arising from this stumbling block are relevant in the treatment of patients with foreign genes. In this

respect, Taniyama et al., have recently outlined a method for non-viral gene delivery to rat blood vessels (see "Local delivery of plasmid DNA into rat carotid artery using ultrasound" in *Circulation* 2002;105:1233). These investigators have employed high-frequency, low-intensity ultrasound irradiation to coax luciferase plasmid (in combination with echo contrast microbubbles (Optison) in pilot experiments, and then followed with anti-oncogene therapy (p53 gene) of balloon injured rat carotids. Both experiments showed effective gene transfer, and the latter transfection resulted in significant reduction in intimal/medial area ratio in transgenic carotid sections. No apparent toxic effects were noted in transfected tissues. This paper may mark the first step in the development of non-viral modes of gene transfer, and therefore may be suitable for human gene therapy. 

ADVANCES IN HEART HEALTH

The Future of Valvular Replacement Research and Therapy


by Jaroslaw Barwinsky · Winnipeg · Canada

The second half of our last century will be characterized as a period of close cooperation between basic, clinical and surgical cardiovascular investigation which lent itself to a rapid pace of innovation in these areas.

This cooperative effort led to direct contributions to identification of pathogenic mechanisms, materials and biophysics which underpinned the development of artificial heart valves and corrective surgical cardiac valve procedures. These findings resulted in better selection of organic valves and/or cardiac valve procedures for a variety of patients. This process is far from complete and the trend shows promise of continuing well into the new century.

Additional research relevant to the biology of cardiac wound healing in recent years has led to better employment of post-operative pharmacological interventions to assist recovery of valve replacement patients. This has led to an elevation of the quality of life of involved or needy patients as well as to a decreased mortality in these patients. Thus these events have proven to be beneficial to science, to individual patients and to society at large. Despite these advances, further research into the molecular basis of dilated or hypertrophic cardiomyopathy associated with chronic valvular disease needs to be carried out to perfect current therapies or to find even more effective surgical or pharma-

cologic therapeutic interventions.

As valvular disease is a global issue with known regional variance, regional impact in terms of cost to society varies. For example, contrary to Asian, African, South American and East Europeans regions, rheumatic fever is practically eliminated from the North American continent. However, shifting North American demographics are underscoring the preponderance of what were known as uncommon valvular problems. Consequently, valve replacement research should be regionalized to meet the needs of local populace and thereby confer a good modicum the cost effectiveness in therapeutic intervention strategies. 

Public Information Important to the Academy

by Ivan Berkowitz · Winnipeg · Canada

An important element of the Academy's Mission is to increase public awareness with respect to cardiovascular health and disease. Buoyed by the great success during the 2001 World Heart Congress in Winnipeg, the Academy's administrative staff provided the leadership for a second world-class opportunity for local citizens to learn from experts on heart health. Supported again by strong sponsorship, marvelous media cooperation and many returning visitors, more than 500 people attended.

Academy Vice President Norman Alpert from University of Vermont and Academy Fellow Norman Hollenberg from Harvard Medical School highlighted the discussions. The other excellent speakers were Beth Salamon from St. Boniface Hospital, Winnipeg; and Arun Chockalingam, Assistant Director, Institute of

Circulatory and Respiratory Health, Canadian Institutes of Health Research, Vancouver. Chairs were Brian Hennen, Dean of Medicine, University of Manitoba; and Gordon Cumming, Vice-president and Medical Director of Great-West Life.

A Public Forum was also held in Trinidad as a feature of the International Symposium co-sponsored by the University of the West Indies and the Academy, March 4 – 8, 2002

Dr. Otoni Gomes, Executive Director of IACS – South America Section has added plans for a Public Forum in Belo Horizonte, Brazil in November during Scientific Forum XII, which will include the founding meeting of IACS – South American Section, as well as during the Academy's 1st World Congress, October 11 – 15, 2003, also in Belo Horizonte, Brazil.



NEWS & VIEWS

1st Meeting of IACS - South America Section

SCIENTIFIC FORUM XII, November 28 - 30, 2002 Ouro Minas Palace Hotel, Belo Horizonte, Brazil ... **I Meeting of the IACS - South American Section** ... IV Ecumenical Forum ... XI Meeting of the ISHR Latin American Section ... II International Forum on Clinical Cardiology ... XX Brazilian Congress of Extracorporeal Circulation ... XII International Forum on Cardiovascular Surgery ... I International Forum on Cardiovascular Physiology ... IV International Symposium on Beating Heart Surgery ... III International Symposium on Artificial Heart Devices

FOR DETAILS, PLEASE VISIT: www.servicor.com.br

Academy to Sponsor 2nd Brazilian Experimental Cardiology Symposium in São Paulo, Brazil – September 21, 2002

The Scientific Sponsoring by: São Francisco de Assis / ServCor Cardiovascular Foundation and the International Academy of Cardiovascular Sciences

This Symposium will be held within the LVII Brazilian Congress of Cardiology:
Web Site: www.cardiol.com.br

Conferences and Symposia Organized/Sponsored by the International Academy of Cardiovascular Sciences

1996

1. Manitoba Cardiovascular Forum – “Angiotensin II Receptor Blockade: Physiological and Clinical Implication”, Winnipeg, Canada (October 18-20) Chairmen: R.E. Beamish and N.S. Dhalla
2. Inotropic Agents and Heart, Tokyo, Japan (November 18-19) – Chair: N. Takeda

1997

1. 5th Annual Research Symposium, Cardiovascular System, Commonwealth of Dominica, West Indies (March 6-11) – Chair: S.S. Parmar
2. Conference on Prevention and Treatment of Cardiovascular Diseases, Smolenice, Slovak Republic (September 17-20) – Chair: J. Slezak
3. First Asia-Pacific Congress on Hypertension, Surat, India (December) – Chair: S. Vajpeyee
4. Cardiovascular Scientific Forum VII, Belo Horizonte, Brazil (December 10-14) – Chair: O. Gomes

1998

1. International Symposium on Heart Disease, Cairo, Egypt (May 18-24) – Chair: M. Ibrahim
2. Yoshio Ito Memorial Symposium at the XVI World Congress of the International Society for Heart Research, Rhodes, Greece (May 27-31) – Chairmen: M. Nagano and N.S. Dhalla
3. International Conference on Heart in Stress, Helsinki, Finland (June 28 – July 3) – Chairmen: D.K. Das and C.K. Sen
4. International Conference on Cardiac Hypertrophy, Tokyo, Japan (October 7-9) – Chair: N. Takeda
5. Scientific Forum on Heart Failure, Belo Horizonte, Brazil (December 11-15) – Chair: O. Gomes

1999

1. International Conference on Antioxidant Therapy in Heart Disease, Bombay, India (January 7-8) – Chair: K.G. Nair
2. International Conference on Diabetes and Cardiovascular Disease, Winnipeg, Canada (June 4-7) – Chairmen: A. Angel and N.S. Dhalla
3. International Congress on Atherosclerosis, Hypertension and Coronary Artery Disease, New Delhi, India (October 14-16) – Chair: S. Rastogi
4. Asia-Pacific Congress, Lahore, Pakistan (October 17-22) – Chair: S.A. Sheikh
5. Scientific Forum on Heart Failure, Belo Horizonte, Brazil (December 1-4) – Chair: O. Gomes

2000

1. Developing Heart Conference, Prague, Czech Republic (May 18) – Chair: B. Ostadal

2001

1. International Conference on Pathophysiology and Drug Therapy of Cardiovascular Disorders, Patiala, India (January 22-26) – Chair: M. Singh
2. XVII World Congress of the International Society for Heart Research, Winnipeg, Canada (July 6-11) – Chair: N.S. Dhalla
3. 24th Annual Meeting of the Japanese Section of Cardiac Structure and Metabolism, Beppu, Japan (December 2-9) – Chair: N. Makino

2002

1. International Symposium and Workshop “Advances in Cardiovascular Research”, Trinidad, West Indies (March 4-8) – Chair: J. Barnes

SCHEDULE OF INTERNATIONAL CONFERENCES

2002

June 30 - July 2, Stara Lesna, the High Tatras, Slovak Republic: A Symposium organized by Institute for Heart Research, Slovak Academy of Sciences in collaboration with: International Academy of Cardiovascular Sciences - "THE FAILING HEART - from Molecular Mechanisms to Clinical Application"
Web site: nic.savba.sk/sav/inst/usrd/usrdconfer

July 19-20, Sapporo, Japan: The 2nd Meeting of the Japan Section of the International Academy of Cardiovascular Sciences (25th Annual Meeting of the Japanese Working Group on Cardiac Structure and Metabolism); Chairman: Hideaki Kawaguchi MD E-mail: hideaki@med.hokudai.ac.jp

July 24-27, Madison, Wisconsin, USA: 24th Annual Meeting, ISHR, North American Section Translational Approaches to Cardiovascular Disease (Richard L. Moss, Ph.D., Director, UW Cardiovascular Research Center, Professor and Chair, Department of Physiology, Telephone: 608-262-1939, Fax: 608-265-5072, E-mail: rlmoss@physiology.wisc.edu)

Aug 31-Sep 04, Berlin, Germany: XXIV Congress of the European Society of Cardiology
Web site: www.escardio.org

Sept 03-07, Monte Carlo, Monaco: 12th World Congress of the International Society of Cardio-Thoracic Surgeons (Centre Cardio-Thoracique de Monaco, fax : +377 92 168299)

Sept 29-Oct 3, New Delhi, India: 2nd World Assembly on Tobacco Counters Health
Web site: www.watch-2000.org

Oct.1, Winnipeg, Canada: Cardiovascular Awards Day, Institute of Cardiovascular Sciences, St. Boniface General Hospital/University of Manitoba Faculty of Medicine, E-mail: ivan@mts.net

Oct 23-26, Caracas, Venezuela: Fourth Latin American Congress on Hypertension (Rafael Hernandez-Hernandez, MD, rhernan@cantv.net)

Oct 30 to Nov 1, Yamagata City, Japan: 2002 ISHR Japanese section meeting In addition there will be a Satellite Symposium on "Modern Therapy of "Congestive Heart Failure" on November 2, 2002 at the same place. Inquiries: Masao Endoh E-mail: mendou@med.id.yamagata-u.ac.jp
Web site: www.square.umin.ac.jp/ishr

Nov 16-20, Chicago, IL, USA: 75th Scientific Sessions of the American Heart Association,
Web site: www.americanheart.org

Nov 23-25, Limassol, Cyprus: "Cardiology Today"
- E-mail: info@escardio.com

Dec 01-03, Buenos Aires, Argentina, ICSE 2002 - Joint Meeting of the International Society for Noninvasive Electrocardiology, Favoloro Foundation and Interamerican Society of Cardiology,
E-mail: icse-2002@congresosint.com.ar

**Nov. 28 - 30, Belo Horizonte, Brazil SCIENTIFIC FORUM XII - Meeting I of IACS - South American Section; PUBLIC FORUM ON HEART HEALTH IV Ecumenical Forum ...- XI Meeting of the ISHR Latin American Section...- II International Forum on Clinical Cardiology ...- XX Brazilian Congress of Extracorporeal Circulation ...- XII International Forum on Cardiovascular Surgery ... I International Forum on Cardiovascular Physiology ...- IV International Symposium on Beating Heart Surgery ...- III International Symposium on Artificial Heart Devices
For details please visit: www.servicor.com.br**

2003

Feb 7-9, Chandigarh, India: Indian Academy of Cardiovascular Sciences will sponsor the 2003 Annual Conference of ISHR,
Enquiries: Contact address: Dr. Anil Grover, Head, Dept. of Cardiology, PGLMER, Chandigarh, India, Telephone: 91 172 747585 ext 244, Fax: 91 172-264484, Email: anilgrover444@hotmail.com

Feb 10-14, Davos, Switzerland, Cardiology Update 2003 (Thomas Lüscher, Prof. And Head of Cardiology, University Hospital Zurich, E-mail: ama@dplanet.ch

Mar 19-22, Florence, Italy: Second International Symposium on PPARs: From Basic Science to Clinical Applications, (Fondazione Giovanni Lorenzini, Via A. Appiani 7, 20121 Milan, Italy, Fax: +39/02/29007017
Web site: www.lorenzinifoundation.org

Mar. 30 - Apr. 2, Chicago, Illinois, USA: American College of Cardiology '03,
Web Site: www.acc.org/index.htm

Apr 27-30, San Antonio, Texas, USA - XVth Scientific Meeting of the Inter-American Society of Hypertension Sponsored by the Inter-American Society of Hypertension, the Council for High Blood Pressure Research and the National Heart, Lung and Blood Institute; Phone: (214) 706-1543
E-mail: scientificconferences@heart.org

May 25-29, Barcelona, Spain: 12th International Congress on Cardiovascular Pharmacotherapy (Jose Milan, Grupo Pacifico, E-mail: gp@pacifico-meetings.com

June 21-24, Strasbourg, France: Heart Failure 2003, E-mail: congress@escardio.org

June 26-30, June, Singapore: 14th Asian-Pacific Congress of Cardiology (Singapore Cardiac Society, Level 3, Mount Elizabeth Hospital, Singapore 228510, fax +65 735 3308, E-mail: scosoc@singaporecardiac.org)

Aug. 30-Sept 3, Vienna, Austria: XXV Congress of the European Society of Cardiology
Web site: www.escardio.org

Sept. 21, São Paulo, Brazil: 2nd Brazilian Symposium on Experimental Cardiology - Promoted by: Department of Cardiovascular & Respiratory Physiology and Experimental Cardiology Group of the Brazilian Society of Cardiology,
Sponsored by: - International Academy of Cardiovascular Sciences - Latin American Section and Experimental Research Dept. - São Francisco de Assis / ServCor Cardio. Foundation (Within the LVII Brazilian Congress of Cardiology / Brazilian Society of Cardiology - www.cardiol.com.br)

Sept 29-Oct 2, Boston, Massachusetts, USA: Update in Clinical Cardiology, Harvard MED-CME, E-mail: hms-cme@hms.harvard.edu

Aug 1-3, Buenos Aires, Argentina: VII World Congress of Echocardiography and Vascular Ultrasound (International Society of Cardiovascular Ultrasound, E-mail: iscu@iscu.org,
Web Site: www.iscu.org)

Oct 11-15, Belo Horizonte, Brazil: 1st WORLD CONGRESS of the International Academy Of Cardiovascular Sciences "On The Way To New Cardiovascular Horizons" Public Heart Health Forum - Scientific Forum XIII
- V Ecumenical Forum
- XIII Meeting of the ISHR Latin American Section
- II Meeting of the IACS - South American Section
- III International Forum on Clinical Cardiology
- XXI Brazilian Congress of Extracorporeal Circulation
- XIII International Forum on Cardiovascular Surgery
- II International Forum on Cardiovascular Physiology
- V International Symposium on Beating Heart Surgery
- IV International Symposium on Artificial Heart Devices
- I Symposium on Clinical and Surgical Veterinary Cardiology
FOR DETAILS, please visit:
www.servicor.com.br/site_iacs/mundial/index.htm

Nov 02-07, Orlando, FL, USA: 76th Scientific Session of the American Heart Association,
Web Site: www.americanheart.org

MISSION STATEMENT AND OBJECTIVES

Our Mission

To promote cardiovascular education of professionals and lay people and to recognize major cardiovascular achievement throughout the world.

The Academy

The International Academy of Cardiovascular Sciences was founded in 1996 and is headquartered in Winnipeg, Manitoba, Canada. Established by renowned Cardiovascular Scientists, Surgeons and Cardiologists, the Academy provides the organizational structure for the world-wide sharing of research and education information in the field of heart health.

Although great strides have been made in improving the death rate from heart disease, heart attacks and related problems are still the number one killer. The Academy believes that a fundamental problem is the lack of transmission of knowledge to the public. Research has found answers but the facts are too slow in moving beyond the labs.

The Academy, through world-wide representation, builds connectivity and encourages networking through traditional means of journals, texts and symposia, as well as consensus panels made up of advisory board members and other experts. The Academy continually pursues new information technologies which will result in more rapid and wider availability of the latest discoveries to help save lives.

Membership

This Academy will consist of Members, Fellows, Corporate Members, Patrons and Supporters.

a) Members: Cardiovascular Academics, Scientists, Cardiologists, Surgeons and Health Professionals who are interested in furthering the objectives of the Academy can apply for membership of the Academy.

b) Fellows: An individual with outstanding achievements in cardiovascular research and education who will be elected by membership with 80% majority.

The number of Fellows will not exceed 250 at any given time.

c) Corporate Members: Any corporation or organization which shares the mission of the Academy and willing to support its activities will be invited to become Corporate Members.

d) Patrons and Supporters: Any individual who shares the mission of the Academy and is willing to support its activities will be invited to become part of the Academy in an appropriate category.

Objectives

1. To promote the scientific basis for the practice of cardiology and cardiovascular surgery by:

a) organizing Cardiovascular Teach-ins all over the world for continued education of practicing physicians, surgeons and experimental cardiologists

b) establishing cardiovascular forums in all major cities of the world for organizing and increasing the interaction of clinical cardiologists as well as surgeons with basic scientists

c) setting up national offices of the Academy for coordinating its activities in different countries

d) cooperating with various national agencies in different countries concerned with the education of medical students, graduate students and postdoctoral fellows

e) collaborating with various national and international organizations dedicated to both clinical and experimental research in the area of cardiovascular sciences

2. To foster the exchange of information among cardiovascular scientists by:

a) establishing national and international networks of various centres and institutions for optimal utilization of resources

b) promoting exchange programs among different countries through respective governmental agencies

c) holding scientific symposia on focussed topics of current interest

d) developing news bulletins highlighting different programs of cardiovascular centres and institutes all over the world

e) adopting cardiovascular journals, publishing books and symposia proceedings and a quarterly Official Bulletin *CV NETWORK* as well as developing an interactive Web Site - www.heartacademy.org - for promoting cardiovascular education

3. To increase public awareness with respect to cardiovascular health and disease by:

a) making the general public aware of the cardiovascular risk factors by holding public seminars and lectures

b) expressing views on cardiovascular issues through national and international media

c) cooperating with national government, public and private agencies concerned with improving cardiovascular health and preventing cardiovascular disease

4. To recognize the achievements of cardiovascular investigators by:

a) identifying established investigators of high reputation for awarding Fellowships of the Academy (not more than 250 at any given time)

b) awarding major prizes to distinguished scientists

c) selecting young talents for awards and travel grants

5. To raise funds from individuals and corporate sources for various programs of the Academy by:

a) naming symposia/workshops/seminars in cardiovascular sciences

b) establishing corporate members of the Academy

c) identifying patrons and supporters of the Academy