Promoting Cardiovascular Education, Research and Prevention

CV network

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In This Issue

An Outstanding Conference in New Delhi, India

by S. K. Maulik, New Delhi, India

Dr. James Willerson, President IACS, was conferred Lifetime Achievement Award from International Conference on Cardiovascular Research Convergence

The International Conference on Cardiovascular Research Convergence was held on the 17th and 18th of February 2012 at the All India Institute of Medical Sciences (AIIMS), New Delhi, India under the aegis of the International Academy of Cardiovascular Sciences (IACS, International Society for Heart Research (ISHR) and the UK-India Education and Research Initiative (UKIERI). It was jointly organized by the departments of Pharmacology and Cardiology of the AIIMS which have shared a long-term tradition of scientific collaboration for the past three decades.

The two day conference included 16 scientific sessions, 3 orations, 8 keynote addresses and 67 invited lectures. It was attended by scientists from the USA, UK, Canada, Brazil, Netherlands, Japan, New Zealand, and from different parts of India. The conference was inaugurated by Prof. M K Bhan, Secretary, Department of Biotechnology, Government of India. Dr. James T Willerson, President IACS, delivered the presidential address on "Update on adult stem cell treatment of coronary heart disease and severe heart failure in humans", which was highly acclaimed by delegates. He was presented with a "Lifetime Achievement Award"

Prof. M L Bhatia and Prof. P Venugopal two eminent cardiologists, and Prof. S D Seth an eminent cardiovascular pharmacologist of India, were conferred the "Hridaya Ratna" (Jewel of Heart) awards as a mark of appreciation and acknowledgement of contributions to clinical and basic cardiovascular research. Professor Willerson was conferred the AIIMS "Lifetime Achievement Award" at the inauguration ceremony. Other scientists of high international repute who graced the meeting were Prof. N S Dhalla (Canada), Prof. R Roychaudhury (India), Prof. K K Talwar (India), Prof. N K Ganguly (India), Prof R Tandon (India), Prof. K S Reddy (India), Prof. P K Singal (Canada), Prof. G N Pierce (Canada), Prof. M Hori (Japan), Prof. S K Gupta (India) and other distinguished scientists from AIIMS, New Delhi. It was attended by more than 250 delegates including students and teachers from medical colleges all over India.

The conference deliberated on various aspects of research in cardiovascular sciences in India including cardiovascular therapeutics, heart failure, rheumatic heart disease, atherosclerosis and coronary artery disease, experimental pathobiology of cardiovascular disease, stem cell research, proteomics, cardiovascular epidemiology and research methodologies as well as ethics. ▶

EDITORIAL OFFICE: Ivan Berkowitz, Editor and Heart Health Scholar, Institute of Cardiovascular Sciences, St Boniface General Hospital Research Centre, Faculty of Medicine, University of Manitoba, 3021/1 351 Taché Avenue, Winnipeg, Manitoba R2H 2A6 Canada. Tel: (204) 228-3193, Fax: (204) 233-6723; E-mail the Editor: ivan@mts.net • Academy website: www.heartacademy.org

Dr. Inder S. Anand from Minneapolis USA received Dr. P. L. Wahi Award from ISHR – Indian Section

Young scientists from all over India presented their research on this international platform. A special award session for "N. K. Ganguly Award for Clinical Research" and "N. S. Dhalla Award for Basic Sciences" were contested by 12 young scientists. The poster session was contested by 72 delegates with best poster awards given to two best posters each in clinical and basic research streams on both days of the conference.

There was an important session on rheumatic heart disease which was addressed by Prof. N. K. Ganguly and Prof. R. Tandon along with many other cardiologists and basic cardiovascular scientists who deliberated on present status and future directions of research in controlling the burden of rheumatic fever and rheumatic heart disease in countries like India.

The session on heart failure and cardiac transplantation was addressed by eminent cardiologists and cardiovascular surgeons, including Prof. K K Talwar and Prof. B Airan on important issues on therapeutic challenges for refractory heart failure. It was followed by a panel discussion on stem cell therapy and cardiac transplantation by cardiologists and transplant surgeons from public, private and defense institutes. Mrs. Preeti Unhale, a long-term survivor of a successful cardiac transplantation at the All India Institute of Medical Sciences, narrated her success story.

Dr. Bodh I Jugdutt, from Edmonton, Canada received Dr. Manjeet Singh Award from I A C S – India Section

A special session on "Indian system of medicine in cardiovascular sciences" was attended by eminent scientists and chaired by eminent cardiologists and Ayurvedic physicians. They deliberated on possible methods of integrating the holistic approach of Ayurveda into modern cardiovascular practice.

(L – R) Prof. P. Venugopal, Prof. M. L. Bhatia and Prof. S, D, Seth (all from India) were conferred the "Hridaya Ratna" (Jewel of Heart) Award by A I I M S, New Delhi

The "3rd Philip Poole-Wilson memorial symposium" was held on the second day of the conference in the fond memory of internationally famous cardiologist, Dr. Philip Poole-Wilson. The 'Philip Poole Wilson Memorial Oration' was delivered by Prof. K S Reddy on "Global challenge of cardiovascular disease: research to action". Distinguished speakers from the UK delivered cutting-edge lectures on the latest developments and research areas in the prevention, early diagnosis and treatment of heart failure.

The evening of February 17th was made delightful by an enthralling live sarod recital by Amaan Ali Khan and Ayaan Ali Khan, the sons and disciples of the famous sarod maestro, Ustaad Amjad Ali Khan; and a light and sound show at THE Red Fort.

As we complete the 10th year of publication of CV Network, The Executive of the IACS expresses deep gratitude to all who have served this noble endeavour. We specifically thank those who have worked diligently on the Editorial Board. We recognize that we need to add some new ideas so have created a new Editorial Board as follows.

Dr. Willerson Presented Three IACS Awards at the New Delhi Conference in February, 2012

Dr. Yogendra K. Gupta – Chairman, Dept. of Pharmacology at AIIMS, New Delhi, was given the Lifetime Achievement Award

Dr. Balram Bhargava, Professor of Cardiology, AIIMS, New Delhi, was given Distinguished Service Award

Dr. Subir K. Maulik Professor of Pharmacology, AIIMS, New Delhi, was given Distinguished Service Award

A Wonderful International Conference in Uttar Pradesh, India

by S. S. Agrawal, New Delhi, India

The ceremonial opening - L-R Drs. Ashok Chauhan, James Willerson, Naranjan Dhalla and Masatugu Hori

An International Conference on Recent Advances in Cardiovascular Sciences (RACS-5 2012) was held at Amity University, Noida on February 16, 2012 under the aegis of International Academy of Cardiovascular Sciences (IACS) and International Society for Heart Research (ISHR). It was sponsored by Indian Council of Medical Research (ICMR) & Indian Pharmacological Society (Delhi Branch) & Indian Pharmacy Graduates Association. The Conference was organized to increase awareness and to sensitize the society about these killer diseases. Four hundred delegates from all over India attended and presented their research work.

Prof. N. S. Dhalla, Canada was awarded the Lifetime Achievement Award

The International Conference was attended by delegates from across the world including resource persons and scientists from US, Canada, The Netherlands, Italy, Germany, Japan and India who delivered talks on developments in the field of cardiovascular sciences and translational medicine.

Various awards were presented to honour renowned scientists. Prof. N. S. Dhalla, Canada was awarded the Lifetime Achievement Award. Prof. Masatugu Hori, Japan with the Global Achievement Award; Dr. James T. Willerson, USA with the Distinguished Services Award in Drug Research; Prof. Pawan Singal, Canada, with the Research Excellence & Innovation Award; Prof. Grant N. Pierce, Canada with the Outstanding Contribution in Cardiovascular Science Award; Prof. Hari S Sharma, the Netherlands with the Excellence in Research & Innovations Award, as well as a special honour to Dr. S. K. Gupta (President of IACS – India) from Dr. Chauhan.

Prof. Masatugu Hori, Japan was awarded with the Global Achievement Award

Welcoming the distinguished speakers and delegates, Dr. Ashok K Chauhan - Founder President, Amity University said that cardiovascular health is of paramount importance for everyone. The incidences of cardiovascular diseases are increasing which calls for the development of new technologies and therapeutic approaches to treat them. Dr. Chauhan expressed his hope that the International Conference will provide new insights to the participants in the area of cardiovascular sciences and encourage the scientists to pursue their research works more intensively.

Dr. James Willerson, USA was awarded with the Distinguished Services Award in Drug Research

The first keynote speaker Prof. Masatsugu Hori - President, Osaka Medical Centre for Cancer and Cardiovascular Diseases, Japan. Dr. Hori shared that an aged population has a higher risk of atrial fibrillation (AF) and since AF is associated with a pro-thrombotic state, the risk of stroke increases five times in patients with AF. Dr. Hori revealed that 2/3rds of the strokes caused by AF can be prevented by using Vitamin K Antagonist (VKA) and Warfarin, but VKA therapy has several limitations including narrow therapeutic range and need for frequent dose adjustments. To combat these side-effects, new oral anticoagulant "Dabigatran" have been developed and clinically tested in 44 countries on 18,113 patients including 500 from India which was successful and now Dabigatran has been approved for clinical use in US, Canada, Japan and several other countries. Dr. Hori revealed that very soon Dabigatran will be approved for clinical use in India.

The second keynote speaker Dr. James T. Willerson - President and Medical Director, Texas Heart Institute, USA, and IACS President, shared his views on heart attacks, cardiovascular diseases and prevention and treatment of acute coronary syndromes (ACS). He revealed that cardiovascular diseases are the number one killer of males and children in the US. Women are 5 times more likely to die of cardiovascular diseases than of breast cancer. In the US, Dr. Willerson reported that over 41 million women are living with cardiovascular diseases. He suggested the panacea for keeping cardiovascular diseases at bay were the correct dosages of Aspirin and Thrombin and influenza vaccination which are very effective in preventing and reducing heart attacks.

Prof. Pawan Singal, Canada was awarded
the Research Excellence & Innovation Award

Prof. Naranjan S. Dhalla is a Distinguished Professor and Director of Cardiovascular Developments, St. Boniface General Hospital Research Centre, Faculty of Medicine, University of Manitoba, Winnipeg, Canada and Executive Director of IACS. He presented his scientific lecture which addressed newer insights into the mechanism of cardiac dysfunction in chronic diabetes. He said diabetes is a risk factor for heart diseases. Oxidative stress is the major culprit of diabetes, which causes defects in endothelium vasculature and in turn causes heart dysfunction and arrhythmia. He has also emphasized on renal angiotensin and the effects of ACE inhibitors on it, and particularly the changes at the isozyme and mRNA levels of α–myosin heavy chain and β–myosin heavy chain, which are partially corrected by the use of ACE inhibitors - Enalapril and angiotensin antagonist - Losartan. Further, he showed partial rectification of the reduced sarcolemmal Ca2+ pump and Na+/K+ ATPase activity arose due to cardiomyopathy by the use of Enalapril and Losartan. Dr. Dhalla has also called upon the experts and doctors to take a different approach in finding solutions to cardiovascular diseases.

Prof. Grant N. Pierce, Canada was presented the
Outstanding Contribution in Cardiovascular Science Award by
Drs. Ashok Chauhan (R) and S. S. Agrawal (L)

Prof. S. S. Agrawal-Director General, Director General (Academic, Innovation & Research Coordination) & Officiating Head, Amity Institute of Pharmacy, Amity University, Uttar Pradesh, expressed that it is very fortunate for Amity University to host this Conference for the young scholars and academicians of the country. Prof. Agrawal, who is a renowned pharmacologist and cardiovascular scientist, presented his work on carvedilol, an anti-hypertensive agent used extensively for treatment of hypertension by oral route and hydrochlorothiazide, an anti-hypertensive agent which controls hypertension by increasing urine output (diuresis). He deliberated on two very important aspects, firstly on administration of anti-hypertensive agents through skin instead of oral route with the help of skin penetration enhancers. A patch containing these drugs is fixed on the skin and it delivers the drug up to 3 days. Secondly, on time specific release of drugs through tablets containing anti-hypertensive agent which can be given in night but it disintegrates in morning and action starts in the morning which works for 24 hrs. It's good for patients who forget to take medicine in daytime. The formulation can be given at night and drug action starts after 8 to 10 hrs. The lag time was controlled by different layers of the tablet.

Dr. Pawan Singal, Professor of Physiology and Director of the Institute of Cardiovascular Sciences, St. Boniface General Hospital and the University of Manitoba, Winnipeg, Canada, spoke about the anti- inflammatory properties of IL-10 which may be regulated through its innate signalling via activation of patterns recognition receptors such as Toll-like Receptors (TLRs). He further said that immunomodulatory effects of IL-10 enhances the expression of TLR4 on cardiomyocytes and triggers secondary mediators leading to cardioprotection. While giving the signalling aspect of the study he told about a downstream signaling molecule, Interferon β Regulatory factor (IRF) 3, a nuclear transcription factor which showed increased expression in IL-10 stimulated cardiomyocytes as compared to control cells. Further, he added that this response was inhibited by MyD88 inhibitor. Overall, his study suggests that MyD88 adaptor molecule is a key factor in anti-apoptotic role of IL-10 in cardiomyocytes.

Dr. Grant N. Pierce, is Professor of Physiology and Pharmacy, University of Manitoba, Winnipeg, Canada. His lecture entitled "Role of Sodium/Calcium Exchange in Cardiac Physiology and Pathophysiology" has emphasized on the involvement of Na+/Ca2+ exchange in ischemic injury to the heart. He has used adenovirus approaches to over-express and knock out the exchanger and then evaluate its effects on cardiomyocyte contractile performance and the response to simulated ischemia/reperfusion. He emphasized that inhibition of NCX expression in adult ventricular cardiomyocytes protects the cell from ischemic insult. An increase in NCX1.1 expression results in more severe Ca2+ overload and damage upon ischemia treatment, and this is most probably due to Ca2+ entry through the exchanger. Ca2+ overload was more pronounced in NCX1.1 than in NCX1.3 transfected neonatal cardiomyocytes. Furthermore, Dr. Pierce summarized that the NHX/NCX pathway is critical for ischemic injury to the heart.


Special honour to Dr. S. K. Gupta (President of IACS – India) from Dr. Chauhan

Indian Institutions Honour 'Iconic Legend' Dhalla

reprinted from Indo-Canadian Telegram

Dr. Naranjan Dhalla and Dr. Harmeet Singh Rehan (3rd from right) with some distinguished guests from different places at the award reception ceremony, Lady Hardinge Medical College, New Delhi

Dr. Naranjan S. Dhalla, Distinguished Professor of the University of Manitoba at the St. Boniface Hospital Research Centre was honoured at three different institutions during his recent visit to India. At the Amity University in Noida, he was given Lifetime Achievement Award for his contribution in understanding the basis of heart function in health and disease. The Amity University with its student population of 75,000 is considered to be the #1 private university of India. The citation for this award describes Dr. Dhalla as "a brilliant scholar, a creative thinker, a visionary educationist, a prolific writer and an iconic luminary in the field of cardiovascular sciences. With deep commitment and resolute determination as hallmarks of his charismatic personality, Dr. Dhalla believes that knowledge is meant for one and all and is greatly admired and respected by his peers". Dr. Dhalla has published more than 750 full length research papers and edited 42 books; his work has been cited more than 12,000 times. He is serving as Editor-in-Chief for a major medical monthly journal "Molecular and Cellular Biochemistry" for the past 25 years and is the Executive Director of the International Academy of Cardiovascular Sciences since 1996.

Dr. Naranjan S. Dhalla was also honoured at the Lady Hardinge Medical College in New Delhi, for his outstanding contributions in cardiovascular pharmacology. This college was the first medical institution devoted to providing education to female students exclusively. Dr. Dhalla launched his research career at this Medical College before coming to USA for studies in Pharmacology in 1961. In addition, he was given special honour by the Punjab Heritage Foundation in Chandigarh for his extraordinary commitment and service to promoting the people of Punjab. Dr. Dhalla was one of the Founding Members of this Foundation and one of their mega projects "Maharaja Ranjit Singh Memorial Park" is near completion. This Memorial marking the peace treaty between British India and Punjab on the bank of Satluj River in Ropar is going to be a major historic tourist attraction and will be managed by the Government of Punjab.

STEERING COMMITTEE and related MEETINGS during ACC Conference, Chicago – March 23-26, 2012

by Ivan Berkowitz, Winnipeg, Canada

The innovative Global Network to Fight Cardiovascular Diseases has been formed by IACS to educate and train medical personnel around the world in translational research, treatment and prevention of cardiovascular diseases (CVD). The goal of the network is to stem the rising rate of CVD by transferring knowledge primarily to emerging nations. The IACS has developed a Global Network Steering Committee composed initially of President James Willerson; IACS Founder and C E O, Dr. Naranjan S. Dhalla; Past-President Sir Magdi Yacoub and Ivan Berkowitz, IACS Heart Health Scholar. There is a plan to meet when many members and representatives of collaborating organizations are attending international meetings such as ACC, AHA and ESC.

For the Committee Meeting Mar. 26, we were joined by Drs. James Willerson, IACS President; Arun Chockalingam; Junbo Ge; Jay Cohn; Jay Mehta; Parloop Bhatt; Jennifer Hall; and Suzy Lanier; and by SKYPE – Naranjan Dhalla and Mohamed Boutdjir. My earlier meetings were with Salim Yusuf; Sharon Mulvagh (together with Parloop Bhatt); Sir Magdi Yacoub; Paul Levine – ex VP of St Jude Medical who introduced Sergio Dubner (from Buenos Aires – founder of ISHNE online conferences); Benedict Maniscalco (and I spoke about our work at his International Conference of Heartbeat International/Global Cardiovascular Alliance); and Jianming Li (and I spoke at his Dinner of Chinese American Heart Association where I had the opportunity to introduce the Global Network vision to Jeannette Bankes, Vice President, Global Clinical Communications and Medical Education at Boston Scientific – she was most interested!)

The major topic was the Plan for India, developed at a meeting in India of Dr. Willerson and Dr. Denis Xavier, Principal Investigator NHLIB-UH Center of Excellence, Bangalore, India. There was consensus that the plan is excellent and we should encourage development and pursue funding. Dr. Yusuf reinforced the suggestion of working with St. John's as a hub, and identify 3-5 partner institutions in India with complementary strengths in different areas of cardiology. As a further extension of the network in India Dr. Mehta introduced the work of Parloop Bhatt at the Care Institute Medical Sciences in Ahmedabad. She presented her vision (as we had discussed extensively with Dr. Mulvagh) to develop a protocol for treating Indian women with CVD. We shared much interest in this project and encouraged them to continue to develop specific plans which we might consider and use as a model in other emerging countries.

I reported on the Program for Mexico. We have received a detailed plan from Dr. Angel Zarain-Herzberg which would support two years of post-doctoral work in Canada by Drs. Alberto Pérez González and Alejandro Ricalde Alcocer. We have made a significant request which is being considered by a corporate friend for 2013.

We were particularly delighted by the participation of Dr. Ge with whom we had preliminary discussions of how we might become involved in China.

I commented on being introduced to online conferences by Dr. Paul Levine, ISHNE and the Chinese American Heart Association. As with use of SKYPE for our meetings, we reflected on potential for linking to such efforts and considering the extension of significantly successful efforts we have made through St. Boniface to add talks to our web site.

Dr. Willerson thanked everyone for attending. He stated we must turn efforts in the next few months to obtaining funds. We welcome all possible assistance in this effort.

The next Steering Committee will be held during AHA in Los Angeles in November, 2012.

Urbanization and cardiovascular disease

Raising heart-healthy children in today's cities

Executive Summary

Non-communicable diseases (NCDs), including cardiovascular disease (CVD), cancers, chronic respiratory diseases and diabetes, are the biggest cause of death globally, killing more people each year than all other causes combined.[1] In September 2011, the United Nations (UN) convened a High-Level Meeting (HLM) on NCDs with Presidents and Heads of State in attendance; this was only the second time in history the UN had convened a special HLM on a specific health issue, and was in recognition of the importance of this group of diseases globally as a threat to human health and a hindrance to economic development.

> *CVD is often referred to as a lifestyle disease. This term is misleading however; it implies individual responsibility for, or choice of, poor heart health. It does not take into account social, economic and physical constraints that may force people into unhealthy behaviour. A mother trying to feed her children with limited budget may have little option but to purchase cheap but unhealthy food high in fat, sugar and salt. Children living in an urban slum may have no space to play and exercise safely. A teenager may be so heavily influenced by industry marketing that they choose to smoke, without knowledge or appreciation of the dangers to health posed by tobacco use. Tackling these issues requires a multi-stakeholder approach: by working together we can improve health education, strengthen healthcare and fight industry tactics, to address the world's number one killer.*
>
> **Johanna Ralston**
> **Chief Executive Officer**
> **World Heart Federation**

New data released by the World Economic Forum during the UN HLM revealed that NCDs will cost economies a staggering $USD 30 trillion over the next 20 years, with one-third being attributed to CVD.[2] This makes CVD the most significant NCD not only in terms of the number of deaths and level of disease they cause but also because of the financial strain they put on countries, especially those least well-equipped to deal with them. Contrary to common belief, the burden of morbidity and mortality from heart disease and stroke is not confined to affluent, high-income countries; with the exception of sub-Saharan Africa, CVD is the leading cause of death in low- and middle-income countries (LMICs),[3] and the cost of inaction is immense.

Major risk factors for CVD include high blood pressure, high cholesterol, smoking, obesity, physical inactivity and diabetes. Much of this risk factor burden can be prevented or controlled, however the rise of CVD in LMICs has been linked to progressive urbanization and the coinciding "globalization of unhealthy lifestyles, which are facilitated by urban life – tobacco use, unhealthy diets, physical inactivity and harmful use of alcohol."[4]

Although urbanization brings with it many great opportunities (including employment choices, healthcare, educational prospects, social connections and political mobilization), inherent to city life are practical and logistical obstacles to adopting heart-healthy behaviours. Urban living can also remove the autonomy of individuals to make healthy choices, via dominant pressures and influences to adopt unhealthy ones.[5] For example, foods high in salt, sugar and fats are often more cheaply and readily available than fresh fruit and vegetables as such, urbanization poses serious health challenges. Children are particularly vulnerable to the negative health aspects associated with city life, as they have the least independence from, and are most manipulated by, their living environment. In unplanned urbanization, which is predominant in LMIC settings, this is accompanied by limitations on space for physical activity including lack of planning, crime, and heavy and dangerous traffic. Thus, CVD is not just an issue of lifestyle and individual behaviour choices it is the environment around such diseases that have a major impact.

In response to the UN HLM and the resulting focus on the prevention of NCDs including CVD, the World Heart Federation commissioned research to examine the perceived relationship between rates of modern urbanization and CVD. With population forecasts predicting continued urbanization in the 21st century,[6] the research specifically queried how our future generations may thereby be at risk of poor heart health.

The research undertook a literature review to assess evidence that children living in cities from Shanghai to Sao Paolo and from Buenos Aires to Mexico City are at increased likelihood of exposure to CVD risk factors, including physical inactivity, unhealthy diets, tobacco use and exposure to second-hand smoke. The study assumes four main observations that:

- CVD continues to be the leading cause of death worldwide, and places a massive socioeconomic burden on individuals and societies, particularly in LMICs.
- Urbanization is continuing to occur rapidly worldwide, particularly in LMICs.
- City living can impose certain limitations on the way in which people live, and restricts their opportunities to be heart healthy.
- Informed action by governments and other stakeholders has been shown to dramatically reduce the level of CVD risk.

The report then makes important conclusions:

- Urbanization tends to hinder heart-healthy lifestyles, particularly for children. For many urban dwellers, heart-healthy options are non-existent, as people are constrained by their physical and economic environments; even those with more freedom from a physicality and economic perspective may be heavily influenced by their social environment, impacted particularly by industry marketing and development via which the consumption of unhealthy food or tobacco becomes intrinsic to city life.
- There is an urgent necessity to consider children specifically in discussions and policy developments related to both CVD prevention, and indeed, city planning, since children are particularly vulnerable to CVD and its consequences.



The report on Urbanization and cardiovascular disease: Raising heart-healthy children in today's cities reveals the cross-cutting links between the environment in which a child lives, the CVD risks that they are exposed to, and the resulting threat of developing CVD. It reveals an urgent need to protect our most vulnerable members of society from poor heart health, and makes recommendations as to how some of the barriers to achieving this can be addressed. Following the commitment of world-leaders at the UN HLM to reduce the burden of NCDs, including CVD, we hope that this report encourages and inspires all those involved in city planning or child care to take action towards a heart-healthy world.

Sidney C. Smith Jr, MD
President
World Heart Federation

- Since the behaviour of children affects the likelihood of an "epidemic" in future years, the report determines that children are core to global efforts to prevent and control CVD, particularly in the context of rapidly urbanizing populations.
- Cities have also been places where success in reducing NCDs has occurred, and there is significant potential to impact the current and future heart health of children by linking to best practices in urban policies around health and development.

Children in LMICs face the most significant burden of CVD. It is possible for children to experience the physical effects of it if they are born with heart defects, or if they develop rheumatic heart disease in their childhood or adolescence. In this instance, they may face a life-time of disability or social stigma, particularly if they are unable to access healthcare. Alternatively, they may face the socioeconomic burden of disease should a family member experience CVD. For example, a family who lose a young parent to CVD not only face the emotional consequences, but also face the prospect of malnourishment and financial debilitation. Finally, since children are our future, they will experience the huge impending global burden of CVD, if we do not take action now.

Dr Kathryn Taubert
Chief Science Officer
World Heart Federation

At the World Heart Federation, we are acutely conscious that with every new generation, we face increased risks to cardiovascular health. Based on the report conclusions, the World Heart Federation is calling for improved prevention of CVD via what the report's authors have termed the **'S.P.A.C.E'** approach: **S**takeholder Collaboration; **P**lanning Cities, **A**ccess to Healthcare; **C**hild-focused dialogue; and, **E**valuation.

- **Stakeholder collaboration:** Making improvements to children's living conditions, and therefore to their health and wellbeing, is not a role for governments alone but for the whole of society: all government sectors, the private sector and civil society including educators and religious leaders intrinsic to child care.
- **Planning cities:** As cities increase in size, it is vital that infrastructures are developed to facilitate heart-healthy behaviour. Policies and strategies that allow individuals to adopt healthy behaviours and avoid unhealthy ones are crucial to successful urbanization.
- **Access to healthcare**: Investment in paediatric diagnostic tools, quality improvements in medical centres, education and increased access to essential medicines will greatly improve CVD outcomes within cities.
- **Child-focused dialogue:** Policy discussions around CVD must focus on children specifically; since children have specific needs, child health should not be wrapped into decisions for adult healthcare.[7]
- **Evaluation:** Reducing CVD risk involves understanding the burden through surveillance; knowing which city dwellers face which barriers to heart-healthy living and why.[4] Once this is understood, actions can be taken to break down the barriers and facilitate healthier lifestyles.

It is recognized that the S.P.A.C.E approach is comprehensive, and may not be fully applicable or affordable for many nations currently experiencing the rapid urbanization of their populations. But it is hoped that the report presents a range of options to policymakers that are looking for initiatives to make a difference to CVD health outcomes, and so, it is hoped, protect the cardiovascular health of generations living in the cities of the future.

The report content is exploratory, and the World Heart Federation recognizes that further research is necessary to facilitate a full understanding of the issues. However, we hope that it provides a useful stepping stone for further studies to explore the determinants of heart health particularly within urban environments.

We also hope that whether you are a policy maker, healthcare professional, business manager, educator, religious leader, parent, researcher or other, you find the report interesting and it stimulates thought around the topic of child heart health linked to city-living. Heart health is everyone's responsibility, and by working together to reduce CVD risks, particularly those risks faced by children, we can fight against the burden of CVD.

Academy Fellow Jawahar Mehta honoured by the JOURNAL of AMERICAN COLLEGE of CARDIOLOGY

Dear Dr. Mehta,

It is my great pleasure to inform you that you have been selected to receive the Simon Dack Award for Outstanding Scholarship in your support of the JACC Journals. The award is presented each year at the JACC Editorial Board meeting at ACC and we do hope you can attend to receive the award in person and be congratulated for your achievement.

Simon Dack was the founding editor of JACC and this award is meant to honor him while extending our appreciation to those who work tirelessly in the role of peer reviewer to ensure that the journals meets their primary mission – the timely publication of important new clinical information. By consistently submitting reviews that are both timely and of high quality you are providing an invaluable service to the journal and to the scientific community. Thank you once again for your efforts.

The award was presented at the JACC Journals editorial board meeting on Sunday March 25 at the Hyatt McCormick Hotel in Chicago.

Sincerely,
Anthony N. DeMaria, MD, MACC

Academy Fellow Frans Leenen: Getting a Handle on Hypertension

Dr. Frans Leenen is the Director of the Hypertension Clinic and Hypertension Research at the University of Ottawa Heart Institute. In 2008, he and fellow Heart Institute researcher Dr. George Fodor led the Ontario Survey on the Prevalence and Control of Hypertension, the most in-depth study of high blood pressure in Canada released in more than 15 years. Recent studies have confirmed their results the past two decades, rates of high blood pressure have not improved and more than 20 per cent of the adult Canadian population has high blood pressure.

Dr. Leenen talked with The Beat about the impact of healthy diet, salt, and obesity on blood pressure, and the contribution of genetics to the field of that, although the control of hypertension in Canada has improved drastically over hypertension research.

The Beat: A recent study projects that more than a quarter of Canadians will have hypertension by 2013. How does this number compare with your data from the Ontario Survey?

Dr. Leenen: That's in line with our findings. The surprising fact is that there's been no real change in the prevalence of hypertension in the past 20 or so years if you look at it by age categories. If you look at the whole Canadian population, the number with high blood pressure has gone up, because you have an aging population, and older people have a much greater chance of having high blood pressure.

The surprising finding is that hypertension rates are not getting worse considering that the prevalence of obesity has been going up. The higher a person's body mass index, the more likely they are to have high blood pressure. So from that perspective, you would expect a much higher prevalence at each age for high blood pressure; but in the total population, somehow that doesn't show up.

This suggests that while there's one group of people that have higher blood pressure because of their weight, there's another group that has less high blood pressure compared to the past. Researchers don't know who that group is yet or what has changed. It's not because of treatment. Up to 60 to 70 per cent of Canadians with high blood pressure are now well treated compared with only 20 per cent a decade or two ago. However, if someone is treated, they're still counted as having high blood pressure in these large studies.

The Beat: Health Canada has reported that most Canadians don't know how much salt they are consuming and how much they should consume. What should people know?

Dr. Leenen: In general, particularly for younger people, a high salt diet reflects an unhealthy diet. In other words, a high salt diet by and large reflects fast food and processed food intake and bad food habits, such as high caloric intake, high sugar intake through soft drinks, and poor nutrition.

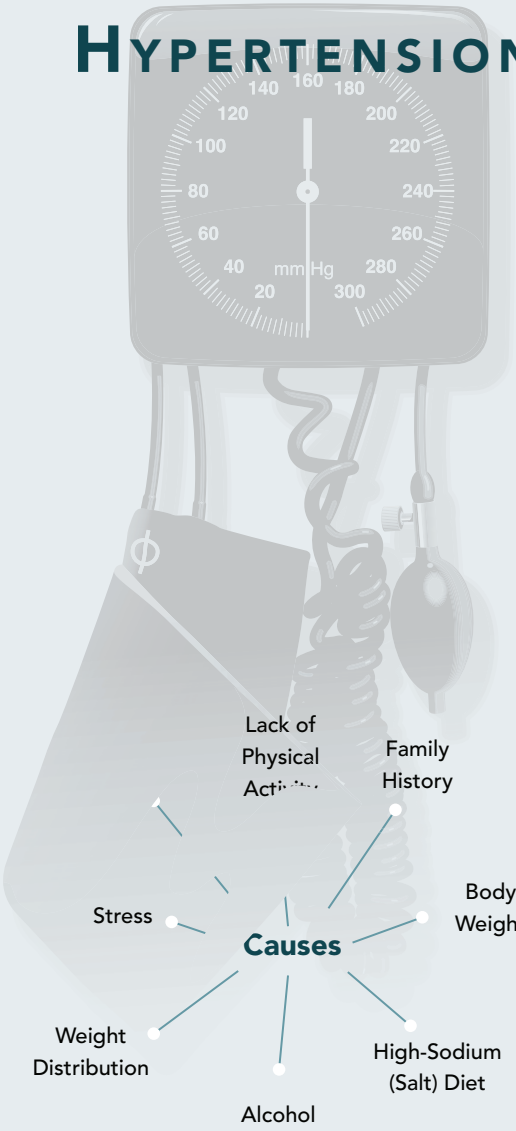
You can highlight a particular food ingredient, like salt, but at the end of the day, if a food item is low in salt but other ingredients are unhealthy, it's still a bad food. You have to look at the whole picture of promoting a healthy diet and lifestyle.

This brings us to what I think should really be the target for prevention of high blood pressure: obesity. In younger people, it doesn't make too much of a difference, but at middle age, things start to change. At 40 to 60 years of age, for people with a normal body mass index, only 12 per cent have hypertension. For the obese, it's up to 40 per cent. In people 60 to 80 years old, about a third with a normal weight have high blood pressure. For the obese, it's nearly 70 per cent—a huge increase and just one impact on your health of being overweight.

Once people are obese, it becomes very difficult, if not impossible, to get back to a normal weight. So the crucial focus needs to be on children, on teenagers, to develop good diet and physical activity and exercise habits early. This requires parents and schools to participate but also the whole community. Public health messages alone are not enough. Like for smoking—the messages on packages of cigarettes aren't the primary reason for the decline in smoking. A variety of other factors are largely responsible, such as that you can't smoke in public anymore and that the price of cigarettes has gone up.

At this moment in our society, fast food, bad food and processed food are cheaper than healthy food. If we cut back on fast food, the salt intake would go down because the two are very much connected. To focus just on salt is not enough. It would be much better to focus on fast food per se. It shouldn't be cool to eat fast food, just like it's no longer cool to smoke. But that requires a change in our perceptions.

Hypertension Affects Your Health



Hypertension = High Blood Pressure

A leading cause of death in North America, it significantly increases the risk of stroke, heart attack, and kidney and heart failure.

Blood Pressure:
The force on vessel walls as blood is pumped throughout the body

Systolic Pressure: The blood pressure exerted as the heart beats

Healthy blood pressure—lower than 130/80 mm Hg

Diastolic Pressure: The blood pressure exerted when the heart is relaxed

High blood pressure—higher than 140/90 mm Hg
Except for those with diabetes—higher than 130/80 mm Hg

Causes

- Lack of Physical Activity
- Family History
- Body Weight
- Stress
- Weight Distribution
- High-Sodium (Salt) Diet
- Alcohol

Lowering Your Blood Pressure Is Important

A decrease of 10/5 mm Hg reduces your risk of serious consequences:

50%	38%	15%	10%
Heart Failure	Stroke	Heart Attack	Death

Keeping It Low

- Be Active
- Eat Healthy
- Stop Smoking
- Reduce Stress
- Keep Weight Off

Healthy Eating

- Eat a healthy, balanced diet
- Keep calories within healthy limits
- Keep sodium lower than 2,000 mg per day
- Keep alcohol to no more than 2 drinks for men and 1 for women per day
- Read food labels and avoid processed foods, canned meats and vegetables, and restaurant and fast foods

Common Medications

To reduce your fluid and sodium levels:
Diuretics (water pills)

To lower your body's response to stress:
Beta-blockers

To relax and widen your blood vessels:
Angiotensin converting enzyme (ACE) inhibitors
Angiotensin receptor blockers (ARBs)
Calcium channel blockers (CCBs)

Information compiled from UOHI sources and Hypertension Canada.

The Beat: What do we know about salt sensitivity in terms of controlling high blood pressure?

Dr. Leenen: For any factor you look at that influences high blood pressure, whether it's salt or stress or alcohol or weight, the impact on your health is very much determined by the genes that you have. Some people can be obese and still have a normal blood pressure. Then there are other people who have only a little increase in their weight and their blood pressure shoots up. It's the same for restricting salt: for some people, blood pressure goes down quite a bit; for some, it makes no difference, and for some people with hyperactive counter-regulatory systems, it actually goes up a little! It's their physiology. It's an interaction of genes and lifestyle.

The Beat: Is that a current focus in your own research?

Dr. Leenen: Right now, we're looking for the genes and mechanisms through which salt can increase high blood pressure in one group of subjects and through which other people can be salt-resistant. If we know exactly how salt affects blood pressure, we can better target treatment against those mechanisms. And if we can better identify people who are salt-sensitive versus salt-resistant, we can help them focus on managing their risk factors. If you knew you had a genetic profile that predisposed you to coronary artery disease, that could give you an extra push in trying to stay healthy.

For our genome-wide association studies, Frederique Tesson, Alexandre Stewart and myself are working with a number of European groups in Belgium, England and Switzerland. These studies require a large number of participants, and it's better to collaborate than to take many years to do it all on your own.

If we had a simple genetic test—a marker for salt sensitivity versus salt resistance—that would help quite a bit. At the moment, the only way of really knowing whether someone's blood pressure is salt-sensitive is to lower dietary salt. If after a number of weeks, you don't see an effect, that could be for one of two reasons. Either their blood pressure is salt-resistant or they didn't lower their salt enough. It's very time consuming to determine the cause.

We also know that people who are salt-sensitive are likely to respond differently to certain medications. This offers targets for more specific drug treatment. For example, if someone's blood pressure is salt-sensitive, there is evidence that they would also respond better to a diuretic. If someone's blood pressure goes up on a low-salt diet, it would probably also go up on a diuretic. There are clearly practical consequences for not knowing what's driving someone's hypertension. ■

Program:

- Invited talks by experts
- Oral presentations by trainees
- Poster presentations
- Pre Symposium Workshops
- Awards for Young Investigators

Will be of great interest to basic scientists, clinicians and healthcare providers in the broad field of cardiology.

Conference Registration: $ 250.00

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Associate Professor and Head
Cardiovascular Research Division
V.I.Lenin University Hospital
Holguin, Cuba. 80100.
Tel: (5324) 421221, 427830
Email: delfin@cristal.hlg.sld.cu
Email: drodriguez@sbrc.ca

Dr. Grant N Pierce
Professor and Executive Director
St. Boniface Hospital Research Centre
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Canada R2H 2A6
Tel: (204) 235-3206, Fax: (204) 235-0793
Email: gpierce@sbrc.ca

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REMEMBERING SOMEONE SPECIAL

by Anita Mehta, Ahmedabad, India

With deep sorrow, we note the sad demise of eminent Pharmacologist Prof. O.D. Gulati, former President of Indian Pharmacological society, former Professor Dean at Govt. Medical college, Baroda and P.S. Medical college, Karamsad, Dist. Anand, who left for his heavenly abode on February 23, 2012.

We, Pharmacology Department at L. M. College of Pharmacy, remember his high degree of leadership qualities as Researcher, Philosopher and Guide. It is an irreparable loss to the pharmacology profession.

May the departed soul rest in peace…

Editor's note – we received many other memorials to Prof. Gulati including the following:

It and deeply grieved and giving this news with heavy heart that my mentor, guide, philosopher and a great teacher Dr. Om Dutt Gulati who has been one of the great pharmacologists of the country, Bhatnagar Awardee, passed away today after a brief illness.

May his soul rests in peace,

Yours sincerely,
Prof. Ramesh K. Goyal,
Narsee Monjee Institute of Management Studies

Please accept my heart felt condolences and convey the same to thefamily of Dr. Om Dutt Gulati.

With best regards,

Sincerely,
Prof. N. K. Ganguly
New Delhi, India

I am deeply grieved to hear of the sad demise of Dr. O D Gulati, the doyen of Indian Pharmacology. He was a great man, most humble, did not involve in politics and devoted his life to research, teaching and helping pharmacologists of our country. Dr. Gulati never missed any IPS Conferences and was a great source of inspiration. It is a big loss to all those who knew him.

Professor S K Gupta, New Delhi

Obiatuary of our beloved Dr O D Gulati is going to be displayed in our Feb journal and web site of the society.
With regards

Prof T K Mandal
General Secretary, IPS

Dr. Gulati was a pioneer of autonomic pharmacology and I always appreciated his work. He was a source of inspiration to very many scientists in India

Dr. Naranjan S Dhalla
Winnipeg, Canada

Past President Honoured

Dr. Stephen Vatner was presented with "Lifetime Achievement Award in Cardiovascular Science, Medicine and Surgery" dated November, 2011

Stephen F. Vatner, MD

PRESENT POSITION University Professor
Director, Cardiovascular Research Institute

FORMERLY Professor of Medicine
Harvard Medical School
Brigham and Women's Hospital
Served 25 years on the Harvard faculty
Chair, Department of Cell Biology and Molecular Medicine
University of Medicine and Dentistry of New Jersey – New Jersey Medical School

SELECTED HONORS

Honorary Doctorates, 1) Kagawa Medical School, Kagawa, Japan, 1992, 2) University of Buenos Aires, Buenos Aires, Argentina, 2008
Research Achievement Award, American Heart Association, 2000
Distinguished Scientist of the American Heart Association Award, 2005
Included in Who's Who in America
Wiggers Awardee, Cardiovascular Section of the American Physiological Society, 1995
Robert M. Berne Distinguished Lectureship Award, 2011
International Academy of Cardiovascular Sciences Lifetime Achievement Award, 2011

SELECTED PROFESSIONAL SOCIETIES

American Physiological Society, 1972
American Society for Clinical Investigation, 1974
American Society for Pharmacology 1974
American Association of Physicians, 1987
President, International Academy of Cardiovascular Sciences, 2005

SELECTED EDITORIAL BOARDS

American Journal of Physiology, 1979 – 1981 & 1985, Board of Medical Editors, American Journal of Physiology- Heart and Circulatory Physiology, 1998 – 2007, Circulation Research, 1981 – 1987, Consulting Editor, 1999, Proceedings of the Society for Experimental Biology and Medicine, 1981 – 1987, Hypertension 1983 – 1989, Circulation, 2000 – present, Journal of Molecular and Cellular Cardiology, Consulting Editor, 2000 – 2008, Basic Research in Cardiology, 2006 – present

EDITOR IN CHIEF

Circulation Research, 1991 - 1999

POSTDOCTORAL RESEARCH TRAINEES (1972 – Present)

Trained more than 50 post doctoral fellows, now currently professors or leaders at other universities.

PUBLICATIONS

Over 450 peer reviewed publications

SELECTED RESEARCH ACCOMPLISHMENTS:

AUTONOMIC REFLEX CONTROL

A. Carotid sinus nerve stimulation elicited reflex coronary vasodilation mediated by withdrawal of sympathetic tone. This was published at a time when it was thought that the coronary circulation was only regulated by metabolic control (1).
B. A new aspect of reflex control of the coronary circulation was described, i.e., by the pulmonary inflation reflex (2).

IMPORTANCE OF STUDYING PHYSIOLOGY IN THE ABSENCE OF ANESTHESIA OR RECENT SURGERY

C. How anesthesia and recent surgery affect the cardiovascular system and autonomic control are summarized in a New England Journal article (3).

MYOCARDIAL ISCHEMIA

D. Stunned myocardium. The finding that brief periods of myocardial ischemia may not result in necrosis, but can cause profoundly delayed recovery of myocardial function (4).
E. Hibernating myocardium. The finding that stunned myocardium can form the basis of hibernating myocardium (5,6).
F. Third window of ischemic preconditioning. In addition to first and second windows, there is even a more delayed aspect resulting from repetitive bouts of ischemia, as occur in patients (7).
G. Coronary vasospasm. Demonstrating vasoactivity of large coronary arteries in the conscious animal (8).

Myocardial hypertrophy.

H. Subendocardial coronary reserve. Limitations of subendocardial flow is the cause of reduced cardiac function in the severely hypertrophied heart (9-11).

Beta Adrenergic Signaling

I. Overexpression of Cardiac Gsa. This model mimicking chronic beta adrenergic receptor signaling results in enhanced function leading to cardiomyopathy, supporting beta blockade therapy for heart failure (12).
J. Disruption of adenylyl cyclase type 5. This model results in longevity, stress resistance, and protection against diabetes and obesity (13).

CITATIONS RELATED TO ABOVE ITEMS:

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2. Vatner SF and McRitchie RJ: Interaction of the chemoreflex and the pulmonary inflation reflex in the regulation of coronary circulation in conscious dogs. Circ Res 1975; 37:664 673.
3. Vatner SF and Braunwald E: Cardiovascular control mechanisms in the conscious state. New Engl J Med 1975; 293:970 976.
4. Heyndrickx GR, Millard RW, McRitchie RJ, Maroko PR and Vatner SF: Regional myocardial functional and electrophysiological alterations after brief coronary artery occlusion in conscious dogs. J Clin Invest 1975; 56:978 985.
5. Shen Y-T and Vatner SF: Mechanism of impaired myocardial function during progressive coronary stenosis in conscious pigs. Hibernation vs. stunning? Circ Res 1995; 76:479-488.
6. Camici PG, Wijns W, Borgers M, De Silva RD, Ferrari R, Heusch G, Knuuti J, Lammertsma AA, Liedtke AJ, Paternostro G and Vatner SF: Pathophysiological mechanisms of chronic reversible left ventricular dysfunction due to coronary artery disease (Hibernating Myocardium). Circulation 1997; 96:3205-3214.
7. Shen Y-T*, Depre C*, Yan L, Park JY, Tian B, Jain K, Chen L, Kudej R.K., Xi Zhao, Sadoshima J, Vatner D.E., Vatner S.F. Repetitive ischemia by coronary stenosis induces a novel window of ischemic preconditioning. Circulation. 2008;118(19):1961-9. *equal contribution.
8. Vatner SF, Pagani M, Manders WT and Pasipoularides AD: Alpha adrenergic vasoconstriction and nitroglycerin vasodilation of large coronary arteries in the conscious dog. J Clin Invest 1980; 65:5 14.
9. Murray PA and Vatner SF: Reduction of maximal coronary vasodilator capacity in conscious dogs with severe right ventricular hypertrophy. Circ Res 1981; 48:25 33.
10. Hittinger L, Shannon RP, Bishop SP, Gelpi R and Vatner SF: Subendomyocardial exhaustion of blood flow reserve and increased fibrosis in conscious dogs with heart failure. Circ Res 1989; 65:971-980.
11. Hittinger L, Mirsky I, Shen Y-T, Patrick TA, Bishop SP and Vatner SF: Hemodynamic mechanisms responsible for reduced subendocardial coronary reserve in dogs with severe left ventricular hypertrophy. Circulation 1995; 92:978-986.
12. Iwase M, Bishop SP, Uechi M, Vatner DE, Shannon RP, Kudej R, Wight DC, Wagner TE, Ishikawa Y, Homcy CJ and Vatner SF: Adverse effects of chronic endogenous sympathetic drive induced by cardiac Gs overexpression. Circ Res 1996; 78:517-524.
13. Yan L, Vatner DE, O'Connor JP, Ivessa A, Ge H, Chen W, Hirotani S, Ishikawa Y, Sadoshima J, Vatner SF. Type 5 Adenylyl Cyclase Disruption Increases Longevity and Protects against Stress. Cell. 2007; 130: 247–258.

INTERNATIONAL ACADEMY OF CARDIOVASCULAR SCIENCES

Harold Buchwald Heart Health Luncheon

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A special opportunity to honour our friend Harold Buchwald C M, Q C, LL D and learn from Dr. Piero Anversa, Director of the Center for Regenerative Medicine at Brigham and Women's Hospital, Harvard Medical School in Boston, how his innovative work on adult (not embryonic) stem cells will lower the incidence of heart attacks and cardiovascular diseases and make possible longer, healthier lives.

Dr. Anversa will be presented with the 2012 IACS Medal of Merit

The IACS is delighted to have the following team organizing the Luncheon:
Honourary chairs: Mrs. Dee Buchwald and Dr. Naranjan S. Dhalla;
Co-chairs: Sidney Halpern, Romel Dhalla, Jack Levit, Klaus Lahr, Jim Carr, Dr. Lorrie Kirshenbaum, Dr. Ian Dixon, Peter Kaufman
Assistants: Teri Moffat, Jon-Jon Santiago
Heart Health Scholar: Ivan Berkowitz

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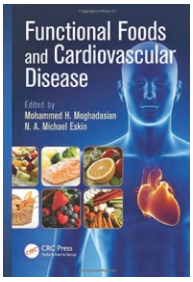
TICKETS can be purchased online - please visit: **www.heartacademy.org**

On our website you can listen to the previous lectures on "Living Past 100" by Dr. Jay Cohn from the University of Minnesota and Dr. Sharon Mulvagh from the Mayo Clinic.
Both talks have stimulated developments in Manitoba of works discussed by Drs. Mulvagh and Cohn.

For more information, please contact Ivan Berkowitz at **(204) 228-3193** or **ivan@mts.net**

Academy Fellow Navin C. Nanda Honoured

Dr. Navin C. Nanda has received several honours recently. Dr. Nanda was presented "The Pride of the World Award" by the Health Minister of India in Delhi, India and the "Life Time Achievement Award" for pioneering work in echocardiography by the Government of the State of Madhya Pradesh, India in Bhopal, India both in September 2011. He was also bestowed the Akantika Dhanvantari Seva Samman Award by the Chikita Sansar Organization Award in Indore, India in October 2011. He was appointed International President of the International Heart Protection Summit organized by the Associated Chambers of Commerce and Industry of India and Honorary International President of the Paramedic and Emergency Medicine Training Institute and Acute Trauma Centre to be established in Jaipur, India. Dr. Nanda was presented two awards in Dhaka, Bangladesh in December 2011 at the Bangladesh Society of Geriatric Cardiology meeting: "Friend of Bangladesh" by Prof. Ruhal Haque, the Hon'ble Minister of Health and Family Welfare of the People's Republic of Bangladesh and a "Life-time Achievement Award" by the Bangladesh National Institute of Cardiovascular Disease for contributions to development of echocardiography and geriatric cardiology in Bangladesh. A special portrait of Dr. Nanda commissioned by the famous Bangladesh painter, Shishir Bhattacharya, was also presented to him by the Hon'ble Minister of Health and Family Welfare, People's Republic of Bangladesh. He was also awarded 3 special insignias from the Army Medical Corps of Bangladesh Armed Forces. These were presented by the Commandant.



Moghadasian releases book

from Website of St. Boniface Hospital Research

Congratulations to Dr. Mohammed Moghadasian, Principal Investigator, Pathology Research, Canadian Centre for Agri-food Research in Health and Medicine, and Professor, Human Nutritional Sciences, University of Manitoba on the release of the book "Functional Foods and Cardiovascular Disease", edited together with Dr. Michael Eskin, Associate Dean and Professor, Department of Human Nutritional Sciences, University of Manitoba.

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(Effective July 1, 2011)

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FDA NEWS RELEASE
For Immediate Release: Nov. 2, 2011
Media Inquiries: Karen Riley, 301-796-4674, karen.riley@fda.hhs.gov
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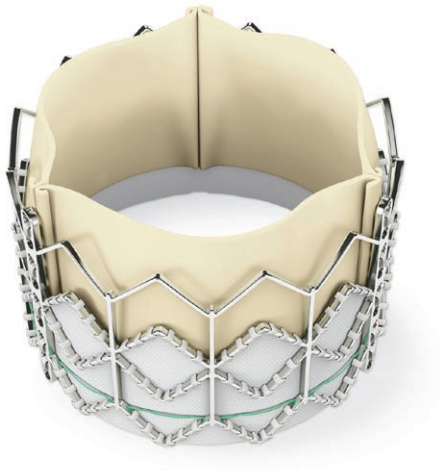
FDA Approves First Artificial Aortic Heart Valve Placed without Open-Heart Surgery



The U.S. Food and Drug Administration today approved the first artificial heart valve that can replace an aortic heart valve damaged by senile aortic valve stenosis without open-heart surgery.

Senile aortic valve stenosis is a progressive, age-related disease caused by calcium deposits on the aortic valve that cause the valve to narrow. As the heart works harder to pump enough blood through the smaller valve opening, the heart eventually weakens, which can lead to problems such as fainting, chest pain, heart failure, irregular heart rhythms (arrhythmias), or cardiac arrest.

Once symptoms of senile aortic stenosis occur, more than half of patients die within two years. To restore normal blood flow, patients with severe aortic valve stenosis need open-heart surgery to replace the diseased valve. However, the procedure is too risky for some patients.

"Surgery to replace the aortic valve is an effective treatment for severe senile aortic valve stenosis. The Sapien Transcatheter Heart Valve (THV) is an example of an innovative new device that will provide some people with this condition who can't undergo open heart surgery with the option of valve replacement," said Jeffrey Shuren, M.D., director of the FDA's Center for Devices and Radiological Health. "The agency remains committed to working with companies who are developing breakthrough treatments that will have a significant impact on patient care in the U.S."

The Sapien THV is made of cow tissue and polyester supported with a stainless steel mesh frame. To replace the diseased valve, the Sapien THV is compressed into the end of a long, thin, tube-like device called a delivery catheter. The delivery catheter, which is slightly wider than a pencil, and the Sapien THV are inserted into the femoral artery through a small cut in the leg and threaded to the site of the diseased valve. The heart valve is then released from the delivery catheter and expanded with a balloon and is immediately functional.

The FDA's approval of the Sapien THV is based on a study in 365 patients who were not eligible for open-heart surgery. Half of the patients received the Sapien valve. The other study patients received another treatment that did not require open-heart surgery. One alternative procedure involved enlarging the aortic valve opening by stretching it with a balloon (balloon valvuloplasty).

Patients receiving the Sapien valve experienced two and a half times more strokes and eight times as many vascular and bleeding complications than patients who did not receive the implant; however, they were more likely to survive one year after surgery. After a year, 69 percent of the Sapien patients were alive compared with 50 percent of those who received an alternative treatment.

Edwards Lifescience, the manufacturer of the Sapien THV, will continue to evaluate the outcomes with the Sapien THV through a national Transcatheter Valve Therapy (TVT) registry. The Society of Thoracic Surgeons and the American College of Cardiology have been working with the FDA and the Centers for Medicare and Medicaid Services to facilitate the creation of the national TVT registry that will serve as a platform for continued evaluation of post market experience with this and future transcatheter devices and procedures for the treatment of aortic stenosis.

The most common serious and potentially life-threatening side effects in patients receiving the Sapien valve and the procedure to implant the valve include death, stroke, perforation of the blood vessels, ventricle or valvular structures, damage to the conduction system in the heart, significant bleeding, and leaks around the new valve.

The Sapien THV is approved for patients who are not eligible for open-heart surgery for replacement of their aortic valve and have a calcified aortic annulus (calcium build-up in the fibrous ring of the aortic heart valve). The product label advises that a heart surgeon should be involved in determining if the Sapien THV is an appropriate treatment for the patient.

It is not approved for patients who can be treated by open-heart surgery. Patients who have congenital heart valve anomalies, have masses or an infection in their hearts, or cannot tolerate anticoagulation/antiplatelet therapy should not receive the Sapien THV.

Edwards Lifescience is located in Irvine, Calif.

For more information: FDA: Medical Devices

The FDA, an agency within the U.S. Department of Health and Human Services, protects the public health by assuring the safety, effectiveness, and security of human and veterinary drugs, vaccines and other biological products for human use, and medical devices. The agency also is responsible for the safety and security of our nation's food supply, cosmetics, dietary supplements, products that give off electronic radiation, and for regulating tobacco products.

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Ti[illegible]ptember 6-9, 20[illegible]

First Announcement

CONFIRMED SPEAKERS

Dr. Denis Angoulvant, Tours, FR
Dr. István Baczko, Szeged, HU
Dr. Sumeet Chugh, Los Angeles, USA
Dr. Naranjan S. Dhalla, Winnipeg, CA
Dr. Dragan Djuric, Belgrade, SRB
Dr. Peter Ferdinandy, Szeged, HU
Dr. Vladimir Jakovljevic, Kragujevac, SRB
Dr. Gábor Jancso, Pecs, HU
Dr. Keld Kjeldsen, Copenhagen, DK
Dr. Frantisek Kolar, Prague, CZ
Dr. Rakesh Kukreja, Richmond, USA
Dr. Antigone Lazou, Thessaloniki, GR
Dr. Bohuslav Ostadal, Prague, CZ
Dr. Grant N. Pierce, Winnipeg, CA
Dr. Tanya Ravingerova, Bratislava, SK
Dr. Elizabeth Roth, Pecs, HU
Dr. Jan Slezak, Bratislava, SK
Dr. Enn Seppet, Tartu, EE
Dr. Carmen Teodorescu, Los Angeles, USA
Dr. Belma Turan, Ankara, TR
Dr. Suresh Tyagi, Louisville, USA
Dr. András Varró, Szeged, HU
Dr. ÁgnesVégh, Szeged, HU

Scientific Contact:

Dr. Danina Muntean, Professor of Pathophysiology,
"Victor Babeș" University of Medicine and Pharmacy
Tel/Fax: +40-256-493085; E-mail: daninamuntean@umft.ro

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Truth is Jesus - St John 14,6

XVIII FORUM - SOUTH AMERICAN SECTION
INTERNATIONAL ACADEMY OF CARDIOVASCULAR SCIENCES

XXX BRAZILIAN CONGRESS OF EXTRACORPOREAL CIRCULATION

XIV ECUMENIC FORUM

VIII BRAZILIAN MEETING ON CARDIOLOGY FOR THE FAMILY

VI MEETING SOUTH AMERICAN CHAPTER OF LE CLUB MITRAL
AT HOSPITAL EUROPEEN GEORGES POMPIDOU

VIII SYMPOSIUM AMERICAN SOCIETY OF
ANGIOLOGY BRAZILIAN CHAPTER

II CARDIOVASCULAR BIOMEDICINE FORUM

IX STUDENT'S BRAZILIAN CONGRESS OF
CARDIOVASCULAR SCIENCES LEAGUES

XIII INTERNATIONAL FORUM ON APPLIED
CARDIOVASCULAR PHYSIOLOGY

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