Dr. Pawan Singal has been appointed as Director of the Institute of Cardiovascular Sciences, St. Boniface General Hospital Research Centre, Faculty of Medicine University of Manitoba, Winnipeg, Canada

Dr. Singal earned his B.Sc. and M.Sc. from Punjab University and Ph.D. in 1974 from University of Alberta. He did post-graduate work at University of Saskatchewan and in 1977, joined the Physiology Department at the University of Manitoba. He became a Professor and together with Dr. Naranjan Dhalla and other colleagues, they launched cardiovascular research at St. Boniface in 1987. Dr. Singal received his D.Sc. degree from Punjab University in 1995. He has served in administrative roles including as Associate Dean, Faculty of Graduate Studies at the University of Manitoba. Dr. Singal is a founding member of the Academy, a Fellow and continues as Director of Education. He has been a key planner and participant in Academy meetings around the world including India, Japan, Brazil, Pakistan, Turkey, Czech Republic, Slovak Republic and Argentina.

Dr. Singal's research has focused on oxidative stress and heart failure. His laboratory initiated and has continued interest in describing the role of oxidative stress in heart cell pathophysiology. For this purpose he employs three different animal models of congestive heart failure subsequent to: adriamycin-induced cardiomyopathy; myocardial infarction; and a chronic pressure overload. He proposed that cardiac dilation may be due to a relative increase in the production of free radicals and lipid peroxides as well as a decrease in the “antioxidant reserve.” This hypothesis has been proven by different hemodynamic molecular biology and histological approaches. Changes in non-enzymatic antioxidants, such as vitamin A and E, are also being characterized to fully understand the oxidative stress changes and their consequences. A major breakthrough in the safe use of adriamycin was achieved in the experimental model developed and reported in the past. These findings may significantly change/improve therapeutic approaches in the treatment of cancer patients. Dr. Singal’s work is recognized world-wide and he has received more than 40 awards/recognitions from different agencies/organizations all over the world.

Dr. Pawan Singal
Director of ICVS
St. Boniface General Hospital Research Centre
Faculty of Medicine University of Manitoba, Winnipeg, Canada

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The 7th Annual Meeting of IACS Japan Section
will be held in

Chairman: Akira Matsumori, MD, PhD
Department of Cardiovascular Medicine
Kyoto University Graduate School of Medicine
54 Kawahara-cho Shogoin, Sakyo-ku
Kyoto 606-8507, Japan
e-mail: amat@kuhp.kyoto-u.ac.jp
The Council developed the following Mission Statement:

**INTERNATIONAL ACADEMY OF CARDIOVASCULAR SCIENCES NORTH AMERICA**

**MISSION STATEMENT**

**Background**

There is no shortage of excitement in the biomedical sciences, where the prospect of inspired, insightful, and innovative research will lead to new discoveries that advance the practice of medicine. It is this enthusiasm that fuels the research enterprise. The advanced practice of medicine brings more effective and improved patient care with a view toward reducing human suffering worldwide.

We are defined by: a) a body of knowledge, which shapes our operational infrastructure and which must continue to evolve in order to advance the practice of medicine; b) a commitment to share this body of knowledge with others to improve health care; c) a dedication to the service of mankind; and d) self governance.

**Objectives**

The objectives of the International Academy of Cardiovascular Sciences (IACS) are to promote education and research to advance the practice of medicine and patient care. These same objectives apply to its IACS/North America. We are of a common purpose.

**Goals**

The IACS/North America will address its objectives through the following goals:

a) the delivery of educational programs that promote and advance the biomedical sciences and health care throughout Canada, the United States and Mexico and when appropriate with its neighbors in Central and South America;

b) an annual scientific session, held in conjunction with the annual scientific program of the Southern Society for Clinical Investigation (SSCI), where biomedical scientists throughout North America and their neighbors in Central and South America can meet to exchange information and ideas and to nurture young biomedical scientists;

c) an annual competition to be held at the joint meeting of the IACS/North America and the SSCI and termed the Young Clinician Scientist Award (YCSA) and Young Basic Scientist Award, with finalists selected from submitted abstracts for this competition and which will be judged by a panel of senior scientists;

d) provision of research opportunities for trainees and biomedical scientists throughout the Americas; and

e) an annual meeting of the IACS/North America, its officers and members of Council, to be held during its annual scientific session.

**Governance**

The IACS/North America is governed by its officers (President, Vice President, Executive Secretary, and Finance Secretary) and members of Council.

April, 2007
IACS North American Section held 1st Annual Meeting in New Orleans – CONTINUED

A highlight was the competition for 2007 Young Clinician Scientist Award of the IACS/NAm on Feb. 9, with these judges:

Finalists:

1. E. Pimenta, University of Alabama at Birmingham
   Aldosterone Excess is Associated with True Treatment Resistance as Indicated by Sustained Ambulatory Blood Pressure Levels and Less White-Coat Effect

2. R. Sukhija, University of Arkansas for Medical Sciences
   Effect of 3-Hydroxy-3-Methylglutaryl-Coa Reductase Inhibitors on Fasting Blood Sugar

3. M. Thomas, University of Tennessee Health Science Center
   Zinc Dyshomeostasis in Rats with Aldosteronism: Response to Spironolactone

4. S. Stavrakis, University of Oklahoma Health Sciences Center
   Pathophysiologic Role of M2 Muscarinic Receptor Autoantibodies in Patients with Diabetic Cardiomyopathy

First Place: M. Thomas
Second Place: R. Sukhija
Finalists: E. Pimenta
           S. Stavrakis

The 2nd Annual Meeting will be in New Orleans, with the Southern Society for Clinical Investigation during February 21-23, 2008.
12-16 MAY 2008
ISTANBUL
TURKEY

NATO-NRARW TRANSLATIONAL KNOWLEDGE FOR HEART HEALTH

NATO country co-director:

Prof. Belma TURAN
Department of Biophysics, Faculty of Medicine
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Cardiology Research Center, Moscow, Russia
Tel: 7 495 415 0035
E-mail: samovilova@cardio.ru

SPEAKERS

Arinc E (Turkey), Avkiran M (UK), Casis O (Spain), Coetzee W (USA), Davidoff A (USA), Dhalla NS (Can), Djuric D (Serbia), Ferdinandy P (Hungary), Fichmeister R (France), Kolar F (Czech Rep), Lopaschuk G (Can), Magyar J (Hungary), Nilius B (Belgium), Ostadal B (Czech Rep), Oto A (Turkey), Pierce G (Can), Ravingerova T (Slovak Rep), Schulz R (Can), Saks V (Estonia), Vassort G (France), Werdan K (Germany), Zaza A (Italy)
The Joint Annual Meeting of the Sections of International Society of Heart Research and International Academy of Cardiovascular Sciences was organized in Bikaner at Sarder Patel Medical College from 16th to 18th February 2007.

This conference was unique in itself as renowned doctors and scientists from all over the world participated in it. This scientific venture was inaugurated at 12:30 pm on 16th Feb. by Prof. N.K. Ganguly, Director General ICMR. The function was presided over by Padma Vibhusan Prof. K.K. Talwar, Director PGI, Chandigarh. Special guests of the function were Dr. S.K. Gupta, Secretary, IACS and Dr. Pawan Singh, Professor, Institute of Cardiovascular Sciences, Canada, Dr. R.B. Panwar, Organizing Chairman, a renowned cardiologist welcomed the gathering. Organizing Secretary Dr. R.P. Agrawal greeted national and international faculties to the “City of the Desert” Bikaner, which is well-known for its hospitality. He also gave an overview of the conference and highlighted on the significance of annual meeting.

The inaugural function was followed by “Wahi Memorial Oration” which was delivered by Dr. N.K. Ganguly, who brought to light the broad spectrum of research work.

The scientific content of the conference was systematically divided into seven session and several guest lectures. First session was based on ‘Heart Failure’ in which eminent doctors presented their work including Dr. Ajay Bahal, Dr. S.R. Mittal, Dr. Issei Imanaga from Japan, Dr. Hari Sharma from Neherlands and Dr. Pawan Singal from Canada who threw light on aspects related to heart failure.

‘India Radial Blitz’ was the second session featuring Dr. David Hilton, pioneer of radial angiography. Dr. S.K. Chugh, Consultant Interventional Cardiology, Escort Heart Institute, New Delhi also shared his views about this latest technique to stop a heart attack.

‘Genetics and Congenital Heart Diseases’ was the core of third scientific session. Dr. Gary D. Lopaschuk from Canada, Dr. Suresh Kumar, Dr. Madhu Khullar, Dr. Rohit Manoj, Dr. Shyamal Goswami, Dr. Meenakshi Sharma, Dr. Madhu Gupta and Dr. Suman Kapur discussed about genetic basis, biomarker research and cyanotic infants. Dr. Alagsan was the special speaker in Navin C. Nanda Oration. He described each and every aspect of echocardiography from its initial stage to recent status.

Dr. B. Ostadal from Czech Republic, Dr. Amarjit Arneja from Canada, Dr. Krishna C. Agrawal from USA, Dr. Rajeev Gupta and Dr. C.C. Kartha presented their original work based on ‘Coronary Artery Disease’ in session four.

A special lecture was delivered by Dr. Bela Shah on strategies for undertaking research on heart diseases in India.

Sixth session, co-chaired by Drs. Pawan Singal and Suresh Gupta, was for young investigators from across the country who presented their original work and satisfied the queries of the panel of judges. The N.K. Ganguly Young Scientist Award for Clinical Research was presented to Dr. Abhishek Kochar for his work on “Arterial stiffness and endothelial dysfunction in patients of diabetes mellitus”.

Last session was based on ‘Molecular Cardiology/Pharmacology/Herbal Therapies/Nutrition’. Dr. R.P. Agrawal, Dr. S.K. Gupta and Dr. V. Dhawan presented their research work with herbs and advocated their use in diabetes mellitus and coronary artery disease while Dr. Harpal Buttar from Canada warned about the risk associated with combined use of cardiovascular drugs and herbs. Dr. Dipak K. Das from USA explained relation of nutrition to healthy heartS. Dr. Jacques de Champlain (Canada), Dr. M.A.Q. Siddiqui (USA) and Dr. Shailendra Vajpayee explained their work on current perspective of molecular cardiology and pharmacology.

Posters were also exhibited by 18 delegates who presented their work belonging to various aspects of heart research. For best poster Dr. R. Beniwal from National Institute of Occupational Health (ICMR), Ahmedabad for “Left atrial abnormality in workers exposed to ozone and nanoparticles” was bestowed with K.K. Talwar Young Scientist Award for Clinical Research and Dr. Tarunveer...
Singh Ahluwalia, PGMIER, Chandigarh for “Promoter Polymorphism of the Endothelial Nitric Oxide gene is associated with type-2 diabetic nephropathy in Asian Indians” was bestowed with K. D. Gupta Memorial Young Scientist Award for Basic Research.

Delegates were entertained by a ride through the famous “Rajasthan Desert” in a comfortable tourist bus. Sunset in the desert was a breathtaking sight. A one night stay at the Himmatgarh Palace Hotel in Jaisalmar and a couple of nights at the Bikaner Palace Hotel presented a once-in-a-lifetime experience to delegates to “live like a prince”! Banquet evening in the Palace grounds was full of colours, food and fun. Award winners were introduced at the Banquet and Dr. Suresh Gupta conducted the society business. Members dispersed with good memories of the place as well as the arrangements.

Dr. Abhishek Kochar, receiving N.K. Ganguly Award from Dr. D.P. Poonia and Dr. Pawan Singal.

**FUTURE OF HEART HEALTH**

Development in South East Asia to be Pursued

Dr. Steven Schaffer, Fellow of IACS, from University of South Alabama in Mobile, has accepted the position of Ambassador to South East Asia. Significantly assisted by his wife Kim, Steve has begun to investigate various opportunities for the Academy to extend its educational activities to that part of the world in which they have numerous contacts and useful experiences.
International Symposium on Recent Advances In Cardiovascular Sciences

by Prof. S.S. Agrawal, New Delhi, India

A two day Symposium was held at Delhi Institute of Pharmaceutical Sciences and Research, New Delhi, India, from 14th-15th February, 2007, at the G.K. Narayan Auditorium of DIPSAR, a premier pharmacy teaching and research institute. The Symposium was co-sponsored by the ISHR (India Section), Department of Science and Technology (DST), Department of Biotechnology (DBT), All India Council for Technical Education (AICTE), Indian Council of Medical Research (ICMR) and Indian Pharmacological Society (IPS, Delhi Branch).

The Symposium was inaugurated at 10 a.m. in the Auditorium by Dr. A.K. Walia, Minister of Finance & PWD, Govt. of Delhi. The function was presided by Dr. Damodar Acharya, Chairman, AICTE and Dr. G. Narendra Kumar, Secretary (T.T.E.), Govt. of Delhi and the President of the Organizing Committee of the symposium. The dais was graced by the presence various dignitaries including the Vice President Dr. S.K. Gupta, Organizing Secretary and Principal (DIPSAR) Prof. S.S. Agrawal and Dr. Pawan Singal from Canada.

Professor S.S. Agrawal, Organizing Secretary, welcomed all the dignitaries, national and international delegates, speakers, faculty and students and gave an overview of the conference, with special focus on the current areas of research in cardiovascular sciences and its implications in Indian scenario. Prof. Gupta, Vice President, highlighted the need for collaborative research in this rapidly growing area of research for achieving rapid breakthroughs that can help the society, at large. Dr. Walia, Minister of Finance & PWD, and also the chief guest of the function, delivered the key note address and expressed his pleasure at being invited to inaugurate the international symposium. He identified cardiovascular research as priority area for which the academia and industry needs to go hand-in-hand. Dr. G. Narendra Kumar Secretary (TTE) and President (RACS) expressed the need of the hour to develop novel drug delivery systems so that the efficacy and safety of the drugs can be improved. Dr. Damodar Acharya brought forward the far reaching effects of such symposia and academic interactions on the quality of research. Dr. Pawan Singal appreciated the warm hospitality extended to all the speakers and assured of necessary support either in form of technical advice, training or financial assistance for further developing cardiovascular research in India. The inaugural function was brought to end by vote of thanks, which was delivered by Prof. B.P. Srinivasan, Head of Office (DIPSAR).

The scientific session was divided into nine sessions spanning over two days. Each session had invited national and international speaker addressing key aspects of research in cardiovascular sciences including, pulmonary hypertension, myocardial hypertrophy and remodeling, novel signaling pathways involved in ischemia/reperfusion, stem cell therapy, angiogenesis, novel therapeutic targets, drug delivery systems, newer advances in coronary angiography, successful prevention modalities and many more.

A major forum for scientific interaction was the Poster Session. Several entries for the Young Scientist award were received and the judges unanimously selected PhD research scholar, Mr. Jha from Institute of Pathology, New Delhi for the award.

A grand cultural show was presented by the enthusiastic undergraduate students of DIPSAR, and was followed by a banquet dinner hosted by the Chief Minister of Delhi, Smt. Shiela Dixit, which was enjoyed by one and all.
The Scientific Conference with International Participation entitled Nutrition, Treatment and Cardiovascular Risk Management was held between May 24-26, 2007 at Hotel Park, Novi Sad, Serbia. This Conference was organized by Serbian Physiological Society and Serbian Association for Arteriosclerosis, Thrombosis and Vascular Biology Research. Dr. Vladimir Jakovljevic, Faculty of Medicine University of Kragujevac and Dr. Dragan Djuric, School of Medicine University of Belgrade served as a Conference Co-presidents (programme/organizing committee) while Honorary Conference Co-presidents were Dr. Naranjan S. Dhalla, Winnipeg Canada; Dr. Grant Pierce, Winnipeg, Canada; Dr. Dennis B. McNamara, New Orleans, US; and Dr. Lazar Leprasanovic, Novi Sad, Serbia. Conference Director was Mr. Ivan Berkowitz, Winnipeg, Canada.

Final program and abstract book (regularly ISBN indexed) were published in English and consisted of 106 accepted abstracts. 15 abstracts were rejected on the base of ad hoc scientific committee evaluation. From total number of abstracts about 30% came from basic research while the rest of abstracts came from the fields of cardiology, endocrinology, diabetes and lipidology, clinical physiology, functional diagnostics, nutrition research, and/or exercise physiology. In addition a monography (regularly ISBN indexed) in Serbian language was published for CME purpose.
Scientific work was presented in eight scientific oral sessions (basic and applied research; new perspectives in cardiovascular research; global intervention at the population level; special guest lecture; atherosclerosis, screening and therapeutical intervention; cardiovascular risk factors and nutrition; food products and technologies for cardiovascular health; physical activity, exercise and cardiovascular health) as well as in poster session (55 and 51 abstracts, respectively). From total number of abstracts 22 abstracts were accepted from abroad.

The total number of participants was more than 150 from 15 countries (Serbia, FRY Macedonia, Bosnia and Herzegovina, Montenegro, Slovenia, Romania, Bulgaria, Slovak Republic, Czech Republic, Russia, Belarus, India, New Zealand, Canada and USA).

The Conference was announced in CV NETWORK - the bulletin of International Academy of Cardiovascular Sciences, web site of Serbian Physiological Society and in local media. The Conference has been supported by Ministry of Science and Environmental Protection Republic of Serbia, Ministry of Health Republic of Serbia, School of Medicine, University of Belgrade, Faculty of Medicine University of Novi Sad, Faculty of Medicine University of Kragujevac, physiological equipment supplier Experimetria Ltd (Hungary), nutrition industry Perutnina Ptuj (Slovenia) and a few pharmaceutical sponsors.

We appreciate very much that Conference has been held under the auspices of Ministry of Science and Environmental Protection Republic of Serbia, Ministry of Health Republic of Serbia, Serbian Academy of Sciences and Arts-Branch in Novi Sad, European Union of Medical Specialists (granted with 12 hours of credits by European Accrediation Council for Continuing Medical Education-EAC-CME) and International Academy of Cardiovascular Sciences.

During the Conference, officials of the International Academy of Cardiovascular Sciences (Dr. Naranjan S. Dhalla, CEO and Executive Director, Dr. Grant Pierce, Director of Scientific Affairs, Mr. Ivan Berkowitz, Director of Development, and two Fellows of the Academy Dr. Dennis B. McNamara and Dr. Steve Schaffer) took the opportunity to visit the Congress Centre Sava in Belgrade which is the planned venue of the 3rd Congress of the International Academy of Cardiovascular Sciences in 2009.
In memoriam:
Sándor Juhász-Nagy, 1933–2007

by Dr. László Szekeres, Szeged, Hungary

Professor Sándor Juhász-Nagy, a distinguished scientist and an eminent researcher in cardiovascular physiology, died in January due to an illness. He was 73 years of age. His death is a great loss to Hungarians and, indeed, to the international cardiovascular scientific community.

His main field of interest was cardiovascular regulation by adaptation of coronary vessels to changing circumstances. As a young researcher at the Debrecen Medical University, Hungary, he acquired an international reputation by elaborating with his friend Matthias Szentiványi on a new theory of the sympathetic regulation of coronary vessels, demonstrating that the coronary vessels possess, independently of the myocardium, their own vasoconstrictor innervation. The next phase of his research activity was devoted to ischemic heart disease. He identified the altered response of cardiac vessels in the ischemic and postischemic phase and indicated the decoupling of the interaction between the myocardial oxygen demand and the metabolic adaptation of the coronary vessels. Starting from these observations, he proposed new angina models. Later, he analyzed the substances participating in the metabolic adaptation of coronary vessels. These experiments started in the pharmacological laboratory of Domingo Aviado at the University of Pennsylvania, United States, and were continued at his final working place, the Semmelweis University in Budapest, Hungary, where he was appointed professor of cardiovascular research. Together with his pupils, Lajos Papp (who became professor and leader of cardiovascular surgery in Pécs, Hungary) and Violetta Kékesi (who became his successor after his retirement), he found that inosine, previously deemed inactive, may have an important modulating effect on cardiac function by its inotropic and cardiac protective action. He and his co-workers have also shown that peptide accumulation in the pericardial space may produce physiological as well as pathological changes. Thus, pericardial endothelin may provoke arrhythmogenic or coronary vasoconstrictory action.

In addition to his theoretical work, his research in the field of cardiac transplantation, extracorporeal circulation, implantation of artificial vessels, etc, was of significant benefit to cardiac surgeons. Dr Juhász-Nagy, with Lajos Papp, also elaborated on quantitative thermographic analysis of the heart to document changes in cardiac metabolism and blood supply. This was also applicable under surgical conditions.

These results have been published in 29 books or book chapters, and in more than 250 papers, which have been cited by over 700 investigators.

In addition to his vast scientific and teaching activity, Sándor Juhász-Nagy was extensively involved in the scientific public life. He was a member of the scientific qualificatory commission for more than two decades. Later, he became president of the National Physiological Board as well as president of the Advisory Board of the Széchenyi Prize Scholarship. Among his many awards, of special note are the Szent-Györgyi Albert prize (1992), the Federation of European Biomedical Societies prize (1993), the Széchenyi prize (1999), the Semmelweis prize (2000), the Medallion of the President of Hungarian Republic (2003) and the ‘Laureatus Academiae’ title from the Hungarian Academy of Sciences (2004).

As a close friend, I knew him well and feel entitled to characterize his personality. In addition to his enormous mental capacity, assiduous character and knack for brilliant ideas, some of his main traits were his modesty and self-forgetfulness when helping his friends and younger colleagues. As editor of the periodical Studia Physiologica, he provided an opportunity for advanced Hungarian researchers to summarize their life's work in a monograph extending 80 to 100 pages. In addition, he had a classical education, which manifested itself during conversations or at disputations devoted to scientific dissertations in which he happened to be the official critical opponent. Everyone enjoyed his superb style and his wonderful sense of humour; contact with him was really enjoyable, and he also profited from this capacity during severe periods of his life. Besides his great life's work we shall always remember him for his optimistic, development-committed and amiable personality.
Dr. Paul M. Vanhoutte was born in 1940 in Belgium, where he obtained his degrees at the University of Gent (B.S., M.S., and M.D.) and the University of Antwerpen (equivalent to Ph.D.). He received his postdoctoral training at the University of Gent and at the Mayo Clinic (Rochester, MN, USA). His academic career started at the University of Gent (Assistant, 1969-1971), followed by the Mayo Clinic (Research Associate, 1972-1973), the University of Antwerpen (Belgium), from Associate Professor to full Professor and Head of the Department of Pharmacology, 1973-1981), again the Mayo Clinic (Professor of Physiology and Pharmacology, 1981-1989) and Baylor College of Medicine (Houston TX, USA, Professor of Medicine, Pharmacology and Physiology, and Director Center for Experimental Therapeutics, 1989-1995). From 1992 to 2002, Dr. Vanhoutte was Vice-President R&D, and Director of Discovery Research at the Institut de Recherches Internationales Servier, in Courbevoie (Paris, France). During his tenure as Director of Discovery Research at Servier, he supervised the discovery and preclinical development of drugs designed for the treatment of cardiovascular diseases, diabetes, obesity, central nervous system disorders, cancer and osteoarthritis. He is currently is the Head of the Department of Pharmacology, and Director of the BioPharmaceutical Development Centre, at the University of Hong Kong. He has been Visiting Professor at the National University of Rwanda (1967?), and the Polish Academy of Sciences (1979). He currently is Honorary Professor at the Peking Union Medical College (Beijing), the Institute of Materia Medica of Beijing, the Ocean University of Qingdao, the Second Military Medical University in Shanghai and the Shanghai Institute of Materia Medica. He also is Visiting Professor at Beijing Medical University, Nanjing Medical University, the University of South Denmark, The University Louis Pasteur in Strasbourg and the University of Zurich. Dr. Vanhoutte is member of the Academia Europea and the Belgian Academy of Medicine, and an honorary member of the Brazilian Academy of Medicine. He is member of the American Association of Physicians, the American Society of Pharmacology and Experimental Therapeutics, the American Heart Association (fellow), the American Society for Clinical Investigation (Emeritus), the American College of Cardiology (fellow), the American College of Angiology (fellow), the American Society for Pharmacology and Experimental Therapeutics, the Belgian Society for Physiology and Pharmacology, the British Pharmacological Society (honoray fellow), the European Society for Pharmacology (fellow), the European Society for Cardiovascular Pharmacology and Experimental Therapeutics, the International Society of Hypertension, the Inter-American Society of Hypertension, and the Society for Vascular Medicine and Biology (fellow). Dr. Vanhoutte is the founder, past-President and member of the Serotonin Club. He is honorary member of the Chinese Pharmacological Society, the German Society of Angiology and the Société Française de Cardiologie. He currently is Vice-President of the French Pharmacological Society. Since 1989, he is Editor-in-Chief of the Journal of Cardiovascular Pharmacology. He has been Associate Editor of the American Journal of Physiology (Heart and Circulatory Physiology), of News in Physiological Sciences, and of the Journal of Vascular Medicine and Biology. He is or has been member of the Editorial Board of many scientific journals (e.g. Circulation, Circulation Research, Hypertension, Journal of Hypertension, American Journal of Physiology, Acta Scientiﬁca Pharmacologica, Journal of Pharmacology and Experimental Therapeutics). He has been member, and chairman, of the Program Project Review Committee of the National Heart Blood and Lung Institute of the NIH (Bethesda, MD, USA). He chaired the IUPHAR Committee for Receptor Nomenclature from 1989 to 1998. He was Secretary General of the International Union of Basic and Clinical Pharmacology (IUPHAR) from 1998 to 2002, and President of the Union from 2002 to 2006. Dr. Vanhoutte has written three theses. He has co-authored or edited 35 books. He has published 535 original research papers, and 495 editorials, reviews or chapters in books. His major scientific contribution has been to appreciate and analyse the importance of endothelial cells in the control of the underlying vascular smooth muscle in health and disease, and to highlight the complexity of that regulation. Dr. Vanhoutte has received the Doctor Honoris Causa degree of the University of Gent in 2001, from the Universities of Antwerp, Montreal and Zurich in 2003, from the Royal Melbourne Institute of Technology in 2005, and from the University Louis Pasteur in Strasbourg in 2006. Dr. Vanhoutte is a Highly Cited Researcher (ISI) in three categories: Biology & Chemistry, Pharmacology and Clinical Medicine.

Dr Vanhoutte is convinced that the future in biological and medical research lies with the integration of the explosion of knowledge at the molecular and cellular level with the conventional disciplines (physiology and pharmacology) that attempt to understand the function of the intact organism as a whole. The translational approach yields the brightest future for young scientist, despite its difficulty. Indeed, one of Dr Vanhoutte’s favorite phrases is: “We treat whole people, and not transfected cells”.

Editor’s note: As a new feature of CV NETWORK ONLINE, we will begin articles about Fellows of the Academy. To follow is about Paul Vanhoutte and a book chapter written about Michael DeBakey. We invite all Fellows to submit such information.
Approaching A Century: Michael DeBakey

In matters of longevity, a certain very few men and women not only have outdone the vast majority of humankind, but have made such good use of their extra years that they are a wonderment to the rest of us. These are people who stride through their ninth and tenth decades with much the same enthusiasm and productivity that characterized their fifth or sixth. We would all like to emulate them, but nature and reality dictate that only a minuscule number of us will be granted the realization of that fond hope. Such a devoutly wished-for consummation would demand a unique combination of nature, nurture, and luck given only to supremely rare individuals, who might be called outliers on the graph of human capability.

But as distinctively bestowed as such people may be—as remote as is the possibility that any of us will at a late stage of life be able to do the kinds of things they accomplish daily—there is yet a great deal to be learned by contemplating the examples they set. A great deal can be learned also by meditating on the ways in which personal philosophy can take maximal advantage of constitutional endowment, by meditating on the ways in which some individuals can forge a fusion of mind and body so remarkable that to be in its presence is to experience a surpassing awe for the potentialities of our species. Though perhaps in lesser ways and for a lesser time, the rest of us may learn much that is useful in the lessons these individuals’ lives can teach. And who knows? There may be rare fortunate ones among us who, in later years, will look back and be able to say that we have survived to live life’s final phase as fully as they have.

Such an exemplar of vibrant longevity is Dr. Michael DeBakey. To appreciate what Dr. DeBakey has become in his late nineties requires an understanding of what he has been throughout his life, of which his present moment is only a smooth continuation. What follows here can encompass only the highlights of a remarkable career. Though seemingly a list, it is in fact an honor roll of contributions unmatched in the archive of twentieth-century medical science.

In 1931, while still a medical student at Tulane, twenty-two-year-old Michael DeBakey invented an ingenious roller pump for the propulsion of blood through flexible tubing. Though originally designed for use in circulation research being done by one of his teachers, the pump would twenty years later find a much more valuable application as the crucial component that enabled the development of the heart-lung machine for cardiac surgery.

As director of the Surgical Consultant Division of the Office of the Surgeon General during World War II, Colonel DeBakey made recommendations in several areas that led to major innovations in medical care and education, among them the development of mobile army surgical hospitals (the so-called MASH units) and the founding of the National Library of Medicine. He was also instrumental in organizing the structure that evolved into the Veterans Administration hospital system. In 1948, while in the midst of a burgeoning clinical and research career at Tulane, he was appointed chairman of surgery at Baylor University and began the process that built a world-famous center of innovation and patient care from the rudiments of a struggling medical school with neither an affiliated hospital nor a residency training program. Among his contributions in the next five years was the introduction of the Dacron artificial artery for reconstruction of damaged vessels. He was a pioneer—the pioneer, in fact—in surgery for aneurysms in the chest and abdomen, as well as in the treatment of the occlusions in the carotid artery to the brain that commonly cause strokes. He performed the first successful coronary artery bypass graft in 1964, of which thousands are now being done daily in hospitals throughout the world. So many are DeBakey’s contributions and so prolific has he been in describing them in the pages of the scientific and clinical literature that the entire evolution of cardiovascular surgery is documented in his approximately sixteen hundred publications—and more are in process as these pages are being written. For these achievements and others, DeBakey was recognized for some four decades as the leading cardiovascular surgeon in the world.

In addition to technological achievements such as these, he has been a sought-after consultant to the government of the United States and many other countries, being frequently called upon to make major health policy recommendations as well as to provide surgical consultation and operative care to more than a few world leaders. Such missions have taken him to the former Soviet Union, for example, almost thirty times. The American Journal of Cardiology has hailed him as “the [twentieth] century’s most influential international and national medical statesman,” and the list of honors and titles awarded him by foreign governments and academic institutions goes on for page after page.

In the midst of all this, DeBakey was maintaining a perfectly huge surgical practice, eventually numbering some 60,000 operated patients, of whom he has long-term follow-up studies of 95 percent. Because of his reputation as a surgeon of remarkable dexterity and judgment, the well-worn path to his OR has been trod by the famous and humble of all sorts, from leaders of governments and celebrities of screen and popular entertainment to the many patients referred from the free clinics of Houston.

In the process of building the Baylor College of Medicine to its present eminence, DeBakey not only has been its surgical chairman, but has somehow found the time and energy to be its dean from 1969 to 1979, its chancellor from 1979 to 1996, and indubitably its guiding light throughout his long tenure in that place. And the school’s reliance on his advice has hardly ended: During the visit I made to Houston in June 2005, the
university's president came to consult with him over some particularly thorny administrative problem. In those precincts, he remains indispensable. DeBakey has been the guardian spirit and the primary fund-raiser (and the prodigious personal donor of hundreds of millions of dollars), as well as the foremost teacher, clinician, and administrator of Baylor's medical center. The institution's entire intellectual and physical structure—not to mention its pulsing vitality—is the result of his leadership. To stand surrounded by the school's many acres of ultramodern and world-renowned medical buildings—into which some 60,000 staff members and employees enter each day—is to stand at the epicenter of DeBakey's career.

He operated until the age of ninety, during the final years working together with his former pupil Dr. George Noon. He eventually stopped, as he later told me, "Because there were so many other things that needed to be done." Patient evaluation and postoperative care consume a great deal of time, entailing a constant responsibility that was taking valuable hours and energy more effectively spent in his long-term follow-up studies, his laboratory research developing a cardiac assist device, and his ongoing travels as consultant to so many organizations and governments.

DeBakey and I became acquainted in 1998, when we spent a morning together before participating in a medical press conference in New York City. Since then, we have kept in touch by exchanging an occasional letter and sending each other recent articles we have written. As my thoughts began to turn increasingly toward consideration of the obstacles and opportunities presented by growing older, I from time to time thought about him and wondered at all he was continuing to accomplish. Finally, I decided to approach him as a surgeon should: directly.

I wrote to Dr. DeBakey in the spring of 2005 when he was ninety-six years old, and said that I wanted to visit him in Houston. His open and welcoming response was consistent with my previous experience of him, and within a few weeks I found myself, early on a still-sunny Sunday evening, waiting for him to pick me up outside the entrance to the hotel that is part of the huge medical complex at Baylor.

As I waited for my host to arrive, I let my gaze wander over the vast panorama of buildings that make up the Texas Medical Center. At least three times the size of my own medical complex in New Haven, everything there is in one form or another the product of DeBakey's leadership. His signature is figuratively stamped on the entire expanse of the place. Standing there, I could not help reflecting on the comment made by the son of London's great architect, Sir Christopher Wren (also a physician), shortly after the famous man's death at the age of ninety-one, in 1723. When asked where his father's monument would be, the son was said to have waved his arm as though to encompass the entire city, and said, "You have only to look around you to see it." In its Latin form—Si monumentum requiris, circumspice—those words would soon thereafter be inscribed in Wren's most renowned building, St. Paul's Cathedral. And thus it is with Baylor and Michael DeBakey.

From the hotel, we motored ("motored" is the only word to use when one is a Sunday passenger in a small Porsche sports coupe being driven by an internationally acclaimed multimillionaire heart surgeon) to the DeBakey home less than ten minutes away from the medical complex, where he has lived for some five decades. DeBakey's first wife, Diana, died suddenly of a heart attack in her early fifties, and he has been married for thirty years to the former Katrin Fehlhaber, who was a successful German film actress when he first met her at Jack Benny's eightieth birthday party, held at the home of Frank Sinatra, with whom DeBakey was staying while on a brief working visit to California. I mention these celebrity-soaked details to give some idea of the variegated shades, colors, and experiences in this singular man's adventure-filled life, in which moments with crowned heads, movie stars, and political eminences periodically punctuate the otherwise ceaseless intensity of clinical work, research, and the administration of a topflight academic institution to which he continues to devote his unflagging efforts after sixty years.

In her mid-fifties, Katrin DeBakey is one of those eternally vital women whose wholesome blond beauty is only enhanced by the passage of years. Her guests on that evening were a Lebanese-born cardiologist and his wife, with whom the dinner conversation moved easily across a variety of topics, in each of which our host revealed himself to be authoritative and remarkably well read. Not being accustomed to finding myself in the presence of surgeons with so many eclectic interests, and hardly expecting this one—especially considering the feverish pace of his professional life, abated only somewhat even at ninety-six—to be as deeply informed on such a wide range of subjects as he proved to be (not only during that evening, but throughout our subsequent time together), I sat in barely suppressed astonishment at the breadth of his knowledge of so many things. He demonstrated his familiarity with various examples of literature and poetry; the origins and theology of Islam and Christianity; the historical periods of the Reformation, the Renaissance, and the Industrial Revolution; aspects of the history of science; the eighteenth-century background to American democracy—to mention only the most prominent topics to which the evening's host responded or turned his and our attention.

As we stood near the door during that deliberately prolonged point at the end of the evening when guests know they should leave but don't really want to, Katrin DeBakey responded to something I had earlier said about seeking the basis of her husband's astounding vitality. I had spoken of its ingredients being his constitution (here read as genetic predisposition) plus what I called "something else," the nature of which I hoped to explore during my time in Houston. To her, the "something else" was hardly a mystery. "It's love," she said as if it were the most obvious thing in the world. "We live with love. My husband is surrounded by the love of his patients."

"Love, " DeBakey had devoted his career would seem at opposite poles, and yet, more than one thinker has linked them. Of course, apparent polar opposites are often found to be intimately connected one to the other. Lieben und arbeiten was virtually a motto for Sigmund Freud: To love and to work, he famously said, are the two keys to all that give life its meaning. Work is in itself a kind of love, we were told by DeBakey's fellow Lebanese American, the philosophic poet Kahlil Gibran, when he wrote, "Work is love made visible." When work is approached with love, he was saying, love can be its greatest reward.

Despite my skepticism, then, love would, in fact, prove to be the underlying theme in much of what DeBakey and I talked about during the subsequent day and a half of our discussions: love in its relationship to work, love as a gift given and gotten, love in all of its forms and manifestations. It would become clear that, just as DeBakey is consumed by his dedication to work, he is just as consumed by his dedication to his patients, each as a distinctive individual. His is no abstracted devotion to labor for its own sake. His labors are intertwined with a commitment to others.

DeBakey's research, for example, has not been done in emotion-free laboratories of basic science. The foundation and intent of his research are clinical, a word whose origin tells the origin of his determination in its pursuit, and in its own way bespeaks a kind of love. "Clinical" derives from the Greek noun klinæe, or "bed," and therefore refers to a patient lying down, to a person and not some abstract object. That patient's welfare is the accelerator of the research, and such a fact alone gives the work a sense of personal urgency. Every bit of DeBakey's research and his labors in
the operating rooms and clinics of Houston and elsewhere has been intended to benefit specific people for whom he has taken on responsibility. Though his contributions have been applied by others to the care of hundreds of thousands of men, women, and children, the incentive propelling the research arises from the needs of those individuals who, one at a time, have entrusted themselves to him alone. In treating each of them with the caring devotion of a dedicated physician, he has inspired the love of which his wife speaks. Love has been the warp, and work has been the woof, in the fabric of DeBakey’s life and, as would become clear during our discussions, in the fabric of his longevity as well.

DeBakey’s notion of work is not work alone but work driven by a sense of purpose so strong that it bears him forth as though on its wings. With that sense of purpose has evolved a sense of realism about what can be achieved, especially as age approaches and horizons must inevitably be drawn inward. To draw them closer in ways that make sense is to have found a wisdom about goals, priorities, changing abilities, and altered self-perceptions, which in itself requires that a certain serenity be found. Not unexpectedly, serenity, too, emerged as a theme of DeBakey’s longevity. He has sought it in an unstructured religious faith that is his alone, which imparts not only serenity but a kind of mystical certainty of his relationship with a personal God and with all of humanity.

Though Katrin DeBakey’s response to my question about the “something else” was not at all what I had anticipated, its meaning became more clear as I spoke with her husband during the next two days, much of which we spent huddled together at one end of a long table in the conference room that is part of his suite of offices. For all of his clinical, academic, and governmental achievements, I gradually came to see—both from his direct statements and by listening for it between the lines when he was discussing his longevity—that beyond all else, the factor that has given greatest meaning to this unexpectedly sensitive man’s career is his ability to bring hope to the tens of thousands of individual men and women for whom he has cared. As he would early on the next morning tell me, “The gratification comes from the feeling that you’ve done something important for people. Life, after all, is the greatest thing we have, and doctors are in a unique position to maintain it, to save it, to give it.”

Though speaking specifically of the unique position of physicians in their ability to maintain, save, or give life, DeBakey was saying far more than he may have consciously thought. Doctors are indeed in a unique position for achieving this kind of gratification, but it struck me that there are wide-ranging implications in what he was describing, beyond sustaining physical health alone, or even life. As our discussions proceeded, I came to conclude that he was more generally referring to the broad range of interrelationships between individual people in which one can feel that he or she is doing something for another, whether it be a tangible thing like medical care and life, or primarily what might be called the emotional or spiritual, such as giving comfort and support, or encouraging the development of young people. What counts here is the giving, specifically the giving of one’s abilities and consequently the giving of part of oneself to another. Simply put, the overall concept is the habit of living to ease the lives of one’s fellows.

The dividends of such a life can come to each of us, in an awareness of having contributed something of value. The dividends of such a life come in an awareness of the climate of good that our own actions have fostered. The dividends of such a life come in an awareness of being appreciated and even cherished in return. And that is a form of love, which is the greatest dividend of all.

In such ways, the literal giving of health is revealed to be only one of the possible manifestations of the figurative. To put it another way, if “health” is defined, as it most properly is, as a state of well-being—whether physical, emotional, or spiritual—then it is within the province and capability of each of us to provide it to others. To give sustenance to another is the highest gift, both to him or her and to ourselves, that any of us can imagine. One hardly need be a doctor in order to do the giving. “The gratification comes from the feeling that you’ve done something for people.”

Most of us know these kinds of things, though they have been robbed of a great deal of meaning because they have become the stuff of too much ponderous pap delivered from pulpits, the pages of maxim-filled hortatory literature, and the self-satisfied lips of an occasional latter-day Polonius. But in spite of the windy pontifications in which these ideas are sometimes expressed, mindfulness of them is inherent in human perception, though they are often ignored, forgotten, buried, or simply dismissed as the staggeringly banal pronouncements of would-be sages. But when expounded as the way of life of a man of DeBakey’s worldly experience and philosophic gravitas, and—if of perhaps equal significance—when brought forth as a strategy for long and useful living, the reminders for us to be of benefit to others are imbued with a power well beyond the turgid moralisms in which they are often couched. Examples of the truth of giving to others abound in everyone’s life story, but I will here interrupt my DeBakey narrative to describe one to which I have been witness, as follows.

After recovering from a long and perilous illness about forty years ago, the then chaplain of Yale University, Reverend William Sloane Coffin, said a few words to me that changed my perception of the relationship between doctors and patients—indeed, the relationship between those who give and those who must receive, whether in respect to healing or in any other form. Having spent many weeks being treated on an acute care division of a busy university hospital, Coffin one day shortly before discharge made an observation about what he had seen: “We patients,” he told me, “do more for you doctors than you do for us.” By this he meant that the gratification of being able to help others is an abundance of reward in return. And that is a form of love, which is the greatest dividend of all.
traveled far and wide over the landscape of the “something else” that enables one person and not another to continue to function at a very high level—well beyond the age at which such high-level functioning is expected. But for a moment, it is necessary to return to that other factor, without which the “something else” cannot effectively come into play. Even vast emotional rewards can affect longevity only up to a point if the physical fiber—so much of which comes with our genes—is wanting. Ourselves are held back without our stars, to turn Cassius’s admonition to Brutus on its head. All the “something else” in the world avails only so much when the constitution lacks, whether that constitution’s ingredients are inherited or have been maximized by good fortune and life’s experiences. And here, DeBakey enters the race with that combination of DNA, resistance to rust, and good luck that forms the basis for the something else. His father died at ninety; his mother at almost eighty of malignancy; three of his four siblings are still alive in their nineties; the other, a sister, died of cancer in her eighties; he has never suffered a major illness or accident; save for his first wife’s premature death, his life has been free of tragedy or the debilitating unhappiness inflicted by the sorts of externals over which one has no control.

The age of DeBakey’s siblings is of particular interest in view of the findings of the New England Centenarian Study, which to no one’s surprise found that centenarians are four times more likely than others to have a sibling who lived beyond the age of ninety. But even this is not in itself indubitable evidence that DeBakey’s long living is heavily indebted to heredity. As those who did the study would be the first to point out, members of the same family share more than DNA—they tend to have similar values, and they tend to share such characteristics as eating habits and attitudes toward exercise and intellectual stimulation.

And then there is the matter of DeBakey’s diet. Altogether, we shared four meals during my visit, which included two dinners and two lunches. As he always does, my host ate very little, and he does not hesitate to point out that he thinks this may be a contributing factor to his longevity and to his generally robust health. He bases his opinion on a series of experimental studies indicating substantial prolongation of the lives of laboratory animals fed a diet very low in calories. As I observed DeBakey at each meal, I would estimate that the volume of food he ate was about half mine, or less. At dinner on our second evening, he ordered a dish of pasta and ate one-third of it, which he told me is his usual habit.

And thus, DeBakey has been mightily equipped by nature, circumstance, and choice with qualities necessary for what the seventeenth-century physician-philosopher Sir Thomas Browne in his Hydrriataphia called “the long habit of living.” At ninety-six, DeBakey looked no older than seventy. Though he has not done a whit of fitness exercise since his youth, his five feet ten inches are lean and wiry at 150 pounds. To demonstrate his muscle tone, he at one point pulled up the sleeve of his lab coat and contracted a biceps that projected like a tennis ball from his upper arm, and with the same firmness.

Though there can be no doubt that DeBakey has in such benisons of fate or good fortune been better provisioned than most of us, that cannot alone explain what he is today, in the second half of his tenth decade. There has to be far more, and the more must certainly reveal patterns as useful to everyone as the concept of service to others. Of what, in fact, does the rest of the “something else” consist?

Here is Michael DeBakey explaining it to me, and perhaps, by giving it a literal articulation, explaining it to himself as well:

It is this aspect of seeking knowledge, and, to use an even more direct word, curiosity. Curiosity and the seeking of knowledge is a transcendent life force—almost, you might say, spiritual. It has a driven character to it. It drives you intellectually and, to an extent, physiologically. The brain influences the body in ways we don’t know about.

Here DeBakey is describing what might be called a forward momentum created by the very process of seeking knowledge. As I thought about this notion, both while DeBakey was speaking and while ruminating on it later, it became increasingly clear that these few sentences elucidate not only a key factor in his continuing productivity, but also a clue to the success of his entire career. He goes to bed each night, he told me at one point, looking forward to the morning so that he can do those things he was unable to accomplish on that day. The propulsive momentum of the thing was evident in his description: work to be done, plans to be made, places to go, things to learn—ever new challenges to be taken up. Were I asked to put a name to it all, I would call it the anticipation of the interesting.

Anticipation would seem to be just the right term, because it incorporates the notion of eagerly looking forward to promised intellectual stimulation whose taste can already be almost felt. This urgency of expectancy would seem to be the essence of the thing about which DeBakey was speaking. When he uses the word “driven,” the force and magnitude of the anticipation are exactly what he means. He is driven by the imagined taste of coming pleasure. His mind already senses its flavor because he has known it all his life. Michel de Montaigne wrote about such things: “In every pleasure known to man the very pursuit of it is pleasurable. The undertaking savours of the quality of the object it has in view; it effectively constitutes a large proportion of it and is cosubstantial with it.”

The notion of the imminence of immanent pleasure extrapolates to so many other circumstances, for so many other people. Like beneficence, it is available to all of us. And also like beneficence, it may be an acquired taste, taking hold of us or being deliberately sought not until middle or later years as more time is available and opportunities increase—or perhaps as the energy of career and striving transform themselves imperceptibly into the energy of learning and creativity for their own sakes. For DeBakey, such imminence is the foretaste of new knowledge and the modified continuation of a career. For others, it may be in the anticipated pleasure of working in a blossoming garden; creating an artistic piece of pottery or woodworking; improving a game of golf; seeing old friends; traveling to new places; learning to play a musical instrument or studying a foreign language; finding joy in children’s children; or some combination of all of these and similar enjoyments. In the house of anticipation there are many mansions, each distinctive to the life of the man or woman who finds it. Some pleasurable pursuits arise from the edifice of a career and long-standing interests, as do DeBakey’s. Some are entirely new discoveries. Either way, these pursuits provide the promise of oncoming pleasure.

What is being said here is that knowing one’s limitations and learning to function within them allows the avoidance of the unmanageable. By doing this, it becomes possible to work most effectively in order to achieve chosen aims, without dispersing energy on what can no longer be achieved and then being forced to deal with the thwarting disappointment that necessarily follows. In an earlier chapter, this was described as letting our horizons come closer, and confining our plans to the realistic.

While I know what my limitations are, I also know that by those limitations and by my realizing what they are and working within them, I avoid allowing them to interfere with what I want to do. It doesn’t in any way restrict my intellectual capabilities. By doing that, you see, you also avoid the frustration. This is important to do, in order to maintain the serenity that can affect your life and whatever you’re going to do. Frustration is an enemy in your life. It can be one of the very important negative factors upon your health and your
life. So you must deal with it. Otherwise it harms you—it's harmful to be frustrated too long, and I've learned from my early experience to deal with it and with anger in so many ways—even spiritually sometimes. The same is true with anger. Anger is in some respects a form of frustration. These are things you have to learn how to handle, and as you grow older they become more important, because age also tends to make things much less flexible than they were in your youth. One of the major advantages of youth is its greater flexibility, both mentally and physically. You can substitute for that as you grow older, with what I call wisdom.

Until this point, DeBakey had been speaking of attitudes that serve to sustain intellectual and physical vigor, and, indeed, such matters formed the substance of our discussion. But of equal importance is to avoid patterns of thinking that have a negative effect on powers that might remain intact were they not actively lessened by counterproductive or harmful ways of thinking.

One of the problems of aging is that the mind is ahead of the body. I've noted that some people—some of my colleagues, in fact—have allowed their bodies to deteriorate because they perceive themselves to be old. In other words, they have become impressed with the fact that they are old in years, and therefore respond by being old—and I'm using "old" in the sense of true physical deterioration. Of course, there is a certain amount of that, which does occur with age. Those people who have been blessed with a physical constitution that has maintained intellectual fervor, intellectual vigor, have to come to a certain, you might say, accommodation with the physical limitations that they are no longer able to control.

And so, DeBakey is reiterating, once we understand our limitations and accept them, we can learn to work within them. This is the form of wisdom of which he is here speaking; this is the form of wisdom that brings the serenity that allows us to cope with frustration and anger. Obviously, all of this is circular, with each component feeding back into the others, strengthening them even as it gains strength from them.

I did very little talking as we discussed these matters—there was no need for it. I was communing with a man who was not merely responding to questions put to him, but was, in fact, explicating convictions to which he had quite obviously given a great deal of thought over many years. The words came easily, because they were the expression of long-evolving certainties.

I wanted to know about the role played by faith in DeBakey's thinking, not only faith's involvement in fortune, but also the ways in which faith contributes to the serenity on which he places so much emphasis.

DeBakey was brought up in the Greek Orthodox church of his immigrant Lebanese parents, "in a religious atmosphere," as he puts it. He has tasted of other faiths, and clearly has a wide knowledge of religious forms and practices. But his beliefs are nowadays not restricted to the tenets of an organized church; they are his own, though he describes his most personal manifestations in terms that many other men and women might recognize as being similar to their own.

I have been secure in the knowledge that I have had a relationship with my God, and that he was going to take care of me. My childhood experience in my parents' religion has changed in what I call having matured. I don't think of faith any longer as a child does, and yet I have retained that spiritual relationship with a God that I had as a child—because it gives me a feeling of serenity to do so. I'm not a regular churchgoer, but there again, that's part of the maturity I'm talking about. I don't think I need to go to church. People used to ask me in interviews what church I go to and I'd say, "Yes, I'm in church right now." I'm in church wherever I am. I'm in church at home, I'm in church here. My relationship with God is a personal one.

Thoughts of faith led to questions about belief in afterlife.

I don't know about that, and I'm not concerned about it. Right now I am in a life. I'm secure in my relationship with my God, and I don't need to worry about an afterlife and don't need to have a sense of insecurity about what's going to happen to me. To me, that is part, again, of what I mean by maturity.

The maturity seems to go even further than DeBakey is prepared to say. I could not resist pondering just how much this most self-reliant of men actually does expect from his God. I may have found the answer in a brief article he published only four months before my visit, in the academic journal Surgery, revealingly entitled "Kismet or Assiduity?" The article appeared as part of a series in which distinguished contributors are asked to write brief narratives of personal history or surgical lore. In it, DeBakey tells of taking the oral examination of the American Board of Surgery in 1938, and being asked to evaluate a forty-year-old man ten days post-appendectomy, who had developed fever, right-sided abdominal pain, and an elevated white blood cell count. The young candidate correctly diagnosed an abscess under the diaphragm, a conclusion aided by DeBakey's having recently published a paper on the subject that had, by seemingly lucky coincidence, been read by one of his two examiners, Dr. Fred Rankin. (To this day, that paper is considered a classic description of the problem.) When a few years later Colonel Rankin heard about DeBakey's army enlistment shortly after the attack on Pearl Harbor, he arranged for the new recruit to be assigned to the Surgical Consultant Division in the Office of the Surgeon General, of which Rankin was the head. It was there that DeBakey made his important contributions to the origins of the MASH units, the National Library of Medicine, and the system of veterans hospitals described earlier. In time, he succeeded Dr. Rankin as head of the division.

In the final paragraph of "Kismet or Assiduity?" DeBakey muses over whether it was destiny or his own hard work that conspired to make his good fortune. "In classical literature," he writes, "fate was sometimes defined as ineluctably predestined," and then he goes on to quote the famous Rubaiyat verse about the immutability of words written by the Moving Finger. But in the end, the ninety-six-year-old author of the article comes down solidly in favor of hard work, concluding his piece with a stanza from Longfellow's "A Psalm of Life."

Let us, then, be up and doing. With a heart for any fate; Still achieving, still pursuing. Learn to labor and to wait.

Religious belief, kismet, and enviable DNA notwithstanding, there seems little doubt that Michael DeBakey has made his own psalm of life. Its theme is assiduity.

Having spoken of the past, the present, and the afterlife, I broached the question of DeBakey's future years. What sort of hopes does a ninety-six-year-old man have for the time left to him? Though blessed with constitution and having found that "something else" we had been delving into, he was nevertheless ninety-six, and though it is "just a number," nothing can change it. There are, after all, limits to how far even his prodigious endowments and philosophy can take him. Has he set goals for his remaining days?

I don't dwell on it, and so as a consequence I don't come to a final schedule. Philosophically, I suppose, the basic reason for that is that I don't want to make a schedule. If I do that, it makes me dwell on the schedule and that makes me dwell on its termination. I've long accepted the fact of my own death. I'm ready whenever it comes, in the sense that I know I can't stop it.

But I don't dwell on it. As long as I feel physically and mentally like I feel now, and stay asymptomatic and have a schedule of things that need to be done, I don't think about whether or not I'm going to be alive to do them. So, knowing that sooner or later something is going to happen to me, I just go ahead. When I get on a plane, for example, I'm absolutely sure I'll arrive to where I'm going.

"I'm absolutely sure I'll arrive to where I'm going." The sentence echoes in my mind. I've listened to it over and over, rising up from the tape that recorded it. It seems to encompass Michael DeBakey's reflections on the grace and rewards of aging.

Kismet, assiduity, and every other factor that has made Michael DeBakey the man that he is—all of them came to a focus on February 9, 2006, eight months after my visit to Houston, when a team composed of several generations of surgeons who had trained under his supervision...
operated on him for a life-threatening thoracic aneurysm, an acute disruption of the largest blood vessel in the body a few inches beyond its origin in the heart. The operation they performed on their chief, which is one of the most hazardous and complex in all surgery, was an updated modification of the one DeBakey had introduced in February 1954. The equipment and technology that made it possible were all the result of his originality and inventiveness.

Only a few years earlier, a team of surgeons from the DeBakey Department of Surgery at Baylor had published a paper in the Journal of Vascular Surgery entitled “Emergency Surgery for Thoracoabdominal Aortic Aneurysms with Acute Presentation,” reporting on 112 patients operated upon between 1986 and 1998, with a mortality of 17 percent, a remarkably low figure for such a lethal condition. But perhaps even more remarkable than such outstanding results was their finding that “age did not influence survival rate.” The mean age of the patients in the series was seventy, plus or minus eight years. On the day of his operation, Michael DeBakey was ninety-seven.

DeBakey not only survived, but applied his assiduity to a vigorous program of physical rehabilitation that might have cowed many a younger man. In September 2006, a few days after his ninety-eighth birthday, and shortly before he flew to New York for a research awards luncheon, I received a letter from him in which he wrote, “I am doing very well and hope to have the pleasure of seeing you again sometime soon.”

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**PEOPLE AND PLACES**

**Gift from St. Boniface included Texts, Journals, Bulletins and DVD’s**

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Last Saturday, July 7, 2007 we made the official ceremony of donation of important scientific literature on behalf of the St. Boniface Hospital Research Centre, The International Academy of Cardiovascular Sciences and in the names of Dr. Grant Pierce, Dr. Naranjnan Dhalla, Dr. Larry Hryshko and Ivan Berkowitz MBA.

We gave the donation to the V. I. Lenin Hospital Library and to the Biomedical Research Dept. in the same hospital.

All the material is very useful for our scientific development.

We thank you all for the effort and the solidarity. Specifically, we extend our gratitude to Transat Tours Canada for their assistance with the shipping from Canada to Cuba.

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