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Communications

Honoring Living Legends II

BACKGROUND

In 2001, the Medical Devices Centre at the University of Ottawa Heart Institute established the "Living Legends" awards. These awards recognize achievement and outstanding contributions to medicine, made by living scientists, aged 60 and older who are selected for this honor by their peers. My philosophy behind the Living Legend awards recognized that science through the peer review process for grants, publications, and appointments, often creates a somewhat negative environment. This environment however is vital to self-regulate scientific endeavors and this ensures that strong standards of conduct are maintained. As such, critiquing our peers has become almost second nature, and unfortunately we have often failed to celebrate their excellence and achievements until far too late. Thus, the Living Legend award recipients are identified and selected by their peers and contemporaries, individuals much more prone to critique than celebration. This approach results in perhaps the greatest honor one can receive (e.g., acknowledgment by their peers), and follows on the fine tradition of "festschrift," in honoring great individuals who have taught us all so much and shaped the future of science.

The first series of these awards was presented at the 6th Symposium of the World Artificial Organ, Immunology and Transplantation Society, held in Ottawa, Canada, August 17–20, 2001 (1). The Living Legends honored at that time included Dr. Kazuhiko Atsumi, Dr. Wilfred Bigelow, Sir Roy Calne, Dr. Michael DeBakey, Dr. Naranjan Dhalla, Dr. Wilson Greatbatch, Dr. Roland Hetzer, Dr. Adrian Kantrowitz, Dr. Wilbert Keon, Dr. Willem Kolff, Dr. Juro Wada, and Sir Magdi Yacoub.

In 2006, our group was honored to serve as the host for the 16th World Congress of the World Society of Cardio-Thoracic Surgeons. This Congress entitled "A Multi-Disciplinary Congress in Cardio-Thoracic Healthcare," provided the ideal opportunity to induct the next series of Living Legends. The 2006 Living Legend inductees were thus honored at the World Congress Gala Evening held at Canada's National Arts Centre on Saturday, August 19, 2006. This evening was a truly unforgettable event as over 500 international scientists, researchers, and clinicians came out to honor these new Living Legends who have contributed so greatly to major scientific and technological advances through their work, teaching, and leadership. The 2006 Living Legend inductees included Dr. Donald Beanlands, Dr. Denton Cooley, Dr. Adolfo de Bold, Dr. Joel D. Cooper, Dr. O. Howard Frazier, Dr. Valentin Fuster, Mr. Leon Katz, Dr. Terry Kavanaugh, Dr. Ernst McCulloch, Dr. Donald Olsen, Mr. Manny Villafaña, Dr. John Watson, Dr. James T. Willerson, and Dr. Earl Wynands (Fig. 1).

THE 2006 LIVING LEGEND INDUCTEES

Brief summaries of each of the 2006 Living Legend inductees are provided in alphabetical order.

FIG. 1. "Living Legend" inductees and Surprise Award recipients with the congress officials at the gala evening. Front row (left to right): Dr. Wilbert Keon (Surprise Award recipient), Mrs. Anne Keon (Surprise Award recipient), Dr. Earl Wynands, Dr. Terry Kavanaugh, Dr. Juro Wada (Society Chancellor), and Dr. Joel D. Cooper. Middle row (left to right): Mr. Michael O'Byrne (Master of Ceremonies), Mr. Leon Katz, Dr. Donald Beanlands, Dr. Denton Cooley, Mr. Manny Villafaña, and Dr. O. Howard Frazier. Back row (left to right): Dr. Donald Olsen, Dr. Roy Masters (Local Organizing Committee Chair), Dr. Tofy Mussivand (Society President), Dr. Thierry Mesana (Program Committee Chair), and Dr. Adolfo de Bold. Absent from photo: Dr. Valentin Fuster, Dr. Ernst McCulloch, Dr. John Watson, and Dr. James T. Willerson.

FIG. 2. Dr. Donald Beanlands.

Dr. Donald Beanlands

Dr. Beanlands (Fig. 2) graduated from Dalhousie University as a gold medalist and completed his postgraduate medical training at Dalhousie University and the University of Toronto. He was appointed to the Faculty of Medicine at the University of Toronto in 1962 and became Chief of Cardiology at the Toronto Western Hospital. In 1977, he initiated the development of the Cardiology Division at the University of Ottawa Heart Institute. He was Chief of Cardiology for 19 years and Professor of Medicine at the University of Ottawa.

Known internationally for his teaching, Dr. Beanlands has led national and international training programs with many awards, including the Excellence in Clinical Teaching Award for postgraduate training at the Faculty of Medicine on two occasions to his credit. Dr. Beanlands is recognized as one of Canada's top specialists in Cardiology and has been an investigator in more than 50 research studies and published more than 100 articles. He has chaired numerous committees at both the University of Ottawa and the Heart Institute. He served as Chairman of Cardiology for the Ontario Medical Association, and as the Governor for Ontario for both the American College of Cardiology and the American Heart Association. He has been an Internal and External Reviewer for both the Heart and Stroke Foundation of Ontario and Canada, American College of Cardiology, Medical Research Council of Canada, and the American Heart Association. He has been active in the development of national guidelines for clinical practice and was a member of the Cardiac Care Network of Ontario from 1990 to 1997. In 1997, he was appointed to the Ottawa-Carleton District Health Council, now known as the Champlain District Health Council. Dr. Beanlands' research interest focused on methods of treatment of nonreperfusable intractable angina.

Dr. Denton Cooley

Dr. Cooley (Fig. 3), a son of a Houston dentist, was born in 1920. He attended Johns Hopkins University School of Medicine in Baltimore where he graduated in 1944 with the highest honors and Alpha Omega Alpha. Upon completing his surgical residency, he joined Brompton Hospital in London, England,

FIG. 3. Dr. Denton Cooley.

where he was Senior Surgical Registrar. Upon completing his training, he entered the full-time medical faculty of Baylor College of Medicine where he served from 1951 to 1969, when he resigned to become Chief Surgeon at the Texas Heart Institute. Dr. Cooley is a member or honorary member of over 50 professional societies around the world and a dozen fraternities and clubs.

Among his more than 120 honors and awards are the Grand Hamdan International Award for Medical Science presented in Dubai, November 2000, and the National Medal of Technology presented by President Clinton in 1999. He has been named Distinguished Alumnus for both The University of Texas and Johns Hopkins University. He has received honorary degrees from five American universities and three foreign. He has contributed to the techniques for repair and replacement of diseased heart valves and is widely known for his pioneering surgical treatment of cardiac anomalies of infants and children. Dr. Cooley and his team have performed over 100 000 open-heart operations at his hospital. Dr. Cooley believes his major accomplishment has been the creation of the Texas Heart Institute and developing a school of surgery. More than 800 surgeons are members of the Cooley Surgical Society.

Dr. Adolfo de Bold

Born in Argentina, Dr. de Bold (Fig. 4) completed his university training at the Faculty of Chemical Sciences at the National University of Córdoba where he obtained a professional degree in Clinical Biochemistry. He obtained his MSc and PhD degrees in Experimental Pathology from Queen's University in Kingston, Canada, where he was appointed to academic staff in 1973. In 1986, he established the University of Ottawa Heart Institute Research Centre and became the first director. At present, Dr. de Bold is Professor of Pathology and Laboratory Medicine and of Cellular and Molecular Medicine in the Faculty of Medicine in the University of Ottawa and is Director of the Cardiovascular Endocrinology Laboratory at the University of Ottawa Heart Institute.

In 1981, Dr. de Bold discovered, isolated, and sequenced the cardiac polypeptide hormone named atrial natriuretic factor (ANF) thus establishing that the heart has an endocrine function. His work on ANF has been recognized through numerous distinctions and awards. He has also received numerous distinctions in his native country of Argentina. The multiple properties of ANF have provided many new avenues of research in cardiovascular physiology as well as in very important clinical entities such as hypertension and heart failure. More than 15 000 scientific articles published to date attest to the importance of the ANF discovery. Dr. de Bold has placed ANF within integrative physiology with several important contributions in prestigious journals. The discovery of ANF has made Dr. de Bold one of the most cited Canadian scientists. He has given more than 150 invited lectures worldwide on his field of interest. His work on ANF was declared the first of the top 10 research accomplishments funded by the Ontario Heart and Stroke Foundation in the past 50 years.

FIG. 4. Dr. Adolfo de Bold.

Dr. O. Howard Frazier

Dr. Frazier (Fig. 5) is Chief of Cardiopulmonary Transplantation at the Texas Heart Institute, codirector of the Institute's Cardiovascular Research Laboratories and director of Surgery Research. He is also Chief of the Transplant Service at St. Luke's Episcopal Hospital. His academic appointments include professor of surgery at the University of Texas Health Science Center in Houston, clinical associate professor of surgery at the University of Texas M.D. Anderson Cancer Center, and tenured professor at Baylor College of Medicine in Houston. For more than 25

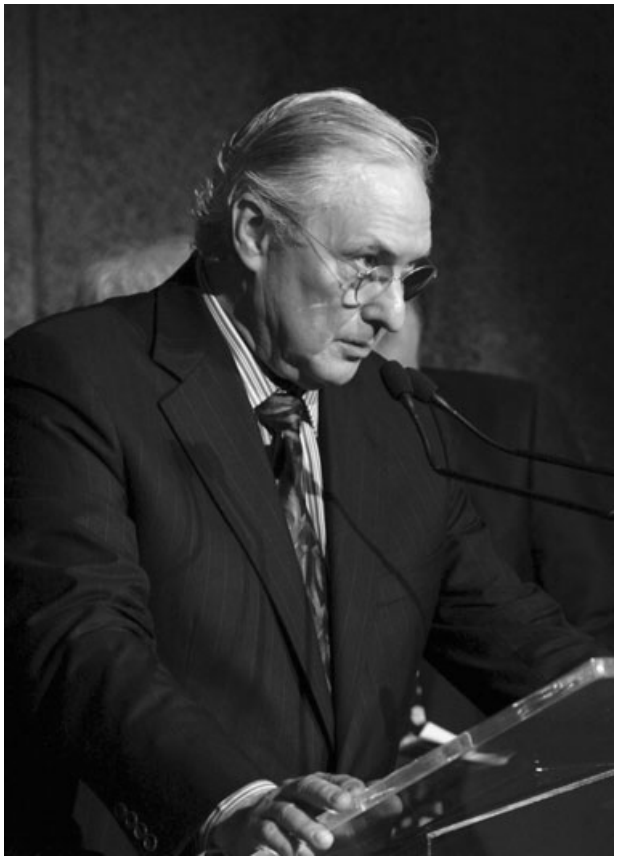

FIG. 5. Dr. O. Howard Frazier.

years, Dr. Frazier has been a pioneer in the treatment of severe heart failure and in the fields of heart transplantation and artificial devices that may be used either to substitute for or to assist the pumping action of the human heart.

During his 20+ years as the director of cardiopulmonary transplantation, Dr. Frazier has guided the service into one of the top transplantation programs in the world. He has performed 1000 heart transplants and implanted more than 661 left ventricular assist devices, more than any other surgeon did in the world. He serves on the editorial boards of several distinguished medical journals, including *Circulation*, the premier journal of the American Heart Association. He has authored or coauthored more than 1000 scientific publications, presented over 700 lectures around the world, and written or edited numerous books in the field of cardiovascular medicine. He is a former chairman of the Federal Affairs Committee for the American Society for Artificial Internal Organs and has served on other prominent committees, including the Education Committee of the American Society of Transplant Surgeons and the Advisory Board of the National Heart, Lung, and Blood Institute. In 2001, he was elected president of the American Society for Artificial Internal Organs.

Dr. Valentin Fuster

Dr. Fuster (Fig. 6) serves Mount Sinai Medical Center in New York as Director of both the Zena and Michael A. Wiener Cardiovascular Institute and the Marie-Josée and Henry R. Kravis Center for Cardiovascular Health. He is the Richard Gorlin, MD/Heart Research Foundation Professor of Cardiology. Currently, Dr. Fuster is also the President of the Scientific Advisory and External Evaluation Committee at the Fundacion Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC) in Madrid, Spain.

He has published more than 400 articles on the subjects of coronary artery disease, atherosclerosis, and thrombosis, and he has become the lead editor of two major textbooks on cardiology, *The Heart* and *Atherothrombosis and Coronary Artery Disease*. He contributed first hand to the launching of the new Forum for Young Investigators of the American Heart Association. Thirteen distinguished universi-

FIG. 6. Dr. Valentin Fuster.

FIG. 7. Mr. Leon Katz.

ties throughout the world have granted him honoris causa. He has also received numerous national and international awards such as the Andreas Gruntzig Scientific Award of the European Society of Cardiology, the Lewis A. Conner Memorial Award for scientific accomplishments by the American Heart Association, and the Distinguished Scientist Award from the American College of Cardiology. Following an exhaustive search, Dr. Fuster has been appointed Editor-in-Chief of a new nature journal that focuses on cardiovascular medicine. In 2006, Dr. Fuster was awarded "The Distinguished Researcher Award" in recognition of his contribution to Cardiology by the Interamerican Society of Cardiology.

Mr. Leon Katz

Leon Katz, BEng (Fig. 7) (McGill University, 1950), has contributed significantly to both Canadian and worldwide healthcare communities, through his ground-breaking research, development, clinical, and regulatory work—in four hospitals in Montreal, and at the Federal Department of Health and Welfare, Bureau of Medical Devices, in Ottawa—from 1950 to 1988.

Katz's career is marked with "firsts" that include outstanding contributions in neurosurgery with Dr. Wilder Penfield and Les A. Geddes: thyroid diagnosis and treatment using radioactive iodine; open-heart bypass surgery with Dr. Edouard Gagnon and Dr. Arthur Vineberg; cardiac catheterization with Dr. Osman Gialloreto; whole-body bypass perfusion during more than 1500 heart operations; vestibular disease; fetal cardiotachometry; arteriography and lymphoangiography; preparation and management of human arterial grafts; modernization and instrumentation of major hospitals; world standards for medical devices; legislative and regulatory control of medical devices; widespread publication of device-related hazards, accidents, and problems, particularly accidental misconnections; discovery of the backflow and infection hazards from nonsterile evacuated blood collection tubes. Leon Katz is the author of many publications in international medical journals, and Member Emeritus of the Canadian Medical and Biological Engineering Society.

Dr. Terry Kavanagh

Dr. Kavanagh (Fig. 8) has achieved an international reputation as a pioneer, clinician, researcher, teacher, and advocate in the field of cardiac rehabilitation, and his contributions have largely structured it as we know it today. In 1968, as Medical Director of the Toronto Rehabilitation Centre, he introduced the cardiac rehabilitation program, which eventually became the largest in North America, and from which came the first postmyocardial infarction patients to enter and complete a Boston Marathon. His contributions to the awareness of exercise as a protective and preventive measure for coronary heart disease are numerous, with more than 100 scientific publications as well as four editions of his best-selling book to help the lay reader attain heart health.

He is a Founding Member of the Canadian Association of Cardiac Rehabilitation, the American Association of Cardiovascular and Pulmonary Rehabilitation, and the World Council of Cardiovascular Rehabilitation. Currently he is an associate professor in the Faculty of Medicine, and professor in the Graduate Program in Exercise Science, Faculty of Physical Education and Health, University of Toronto.

Dr. Donald Olsen

Spending 50 years of very hard work in medical research closely related to veterinary medicine, Dr. Olsen (Fig. 9) implanted total artificial hearts (TAHs) with cardiopulmonary bypass in thousands of calves and sheep, and ventricular assist devices (VADs) in many animals including pigs, even

FIG. 8. Dr. Terry Kavanagh.

recently doing experimental cardiac surgery on alligators. He has about 300 peer reviewed publications, 10 chapters in books, and numerous national and international awards.

Among the positions that he occupied, he worked in the University of Nevada Department of Agriculture and part-time Extension Vet from 1963 to 1972, as consultant to Dr. W.J. Kolff at the University of Utah Artificial Heart Lab from 1967 to 1972, and held a National Institutes of Health (NIH) Postdoctoral Fellowship at University of Colorado School of Medicine from 1968 to 1972. From 1972 to 2000, he was with the Department of Surgery, University of Utah, full-time on TAH project and ended up as full tenured and later Professor Emeritus. Dr. Olsen was one of three surgeons to implant the TAH in Dr. Barney Clark in December 1982. From 2000 to present, he is the president and Principal Investigator at Utah Artificial Heart Institute. The ventricular assist device research is funded by NIH grants (6 million dollars over the next 5 years). NIH records place Dr. Olsen above the 95th percentile of the distribution of (extramural) NIH grants over the last 25 years.

Mr. Manny Villafaña

A leader in the cardiovascular industry, Manny Villafaña (Fig. 10) has founded or cofounded companies that are behind some of the most well-known heart valves today. In 1972, Villafaña founded Cardiac Pacemakers, Inc., which later became Guidant Corp. There, he helped create the first long-life pacemaker. In 1976, he founded St. Jude Medical Inc. There, he helped invent the first St. Jude heart valve. From there, he went on to cofound GV Medical, Inc. in 1982, and ATS Medical, Inc. in 1987. At ATS, Villafaña coinvented the first open-pivot heart valve, a mechanical valve made of pyrolytic carbon. Villafaña's latest project is a start-up company in the field of cardiovascular surgery. He founded CABG Medical, Inc. in 1999 and is currently working on new ways of performing cardiac surgery.

On top of being a sought-after guest lecturer and named National Master Entrepreneur of the Year in 1990, Villafaña also stays involved in the community. He volunteers his time to the Boys and Girls Club of Minneapolis, the Basilica of St. Mary's, and other charitable organizations in the Twin Cities.

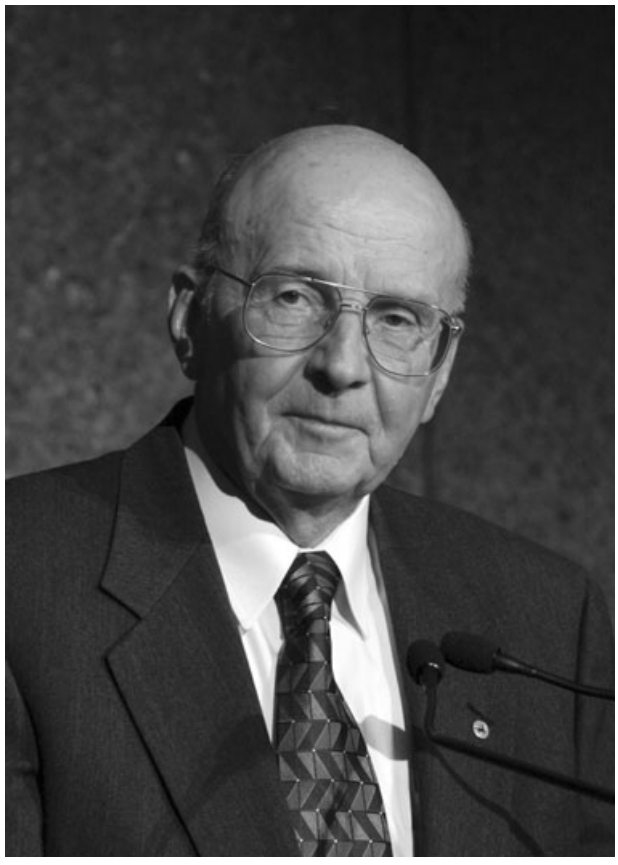

FIG. 9. Dr. Donald Olsen.

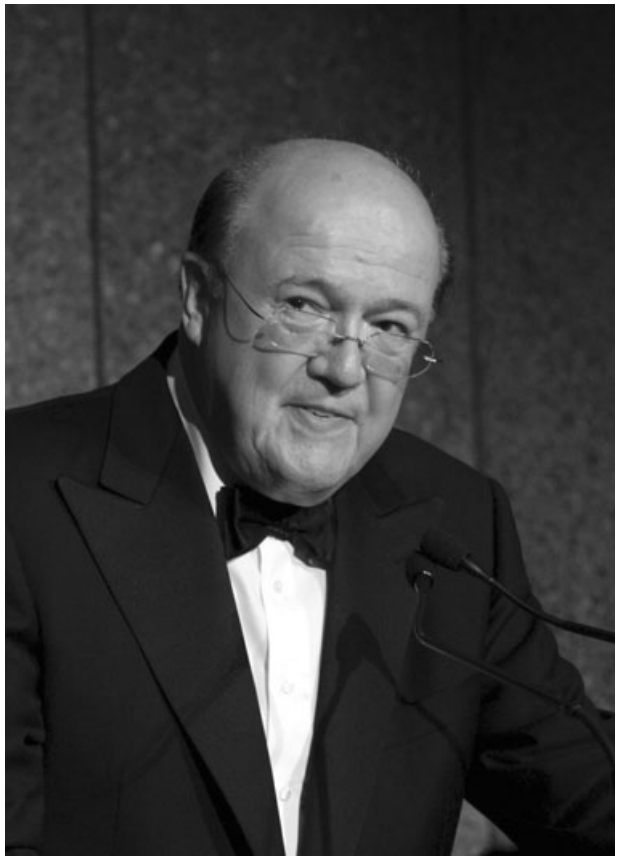

FIG. 10. Mr. Manny Villafaña.

Dr. John Watson

Dr. Watson is the Associate Director of the William von Liebig Center for Entrepreneurism and Technology Advancement, and Professor and Vice-Chair of Bioengineering at the University of California, San Diego (UCSD). For the Center, he works to improve the efficiency of commercializing UCSD Jacobs School inventions. As Professor, his research interests include combination heart failure therapy using bioengineering assisted circulation and adjunct agents. He also conducts research leading to public policy that decreases the timeline from conception to clinical use of new medical innovations.

Dr. Watson attended the University of Cincinnati and later received his MSME from Southern Methodist University while working as a Systems Engineer on the Ling-Temco-Vought XC-142 Vertical Takeoff Transport. He contributed to the design of the hydraulic system that controlled vertical and horizontal flight. To his surprise, the XC-142 was mentioned as a key advance in history celebrating the Wright Brothers and worldwide aviation. He received his PhD in Physiology from the University of Texas Southwestern Medical School in 1972. At Southwestern, Dr. Watson served as an Assistant Professor in the Departments of Surgery and Physiology and Chairman of the Graduate Studies Program in Biomedical Engineering. In 1976, he joined the National Heart, Lung, and Blood Institute (NHLBI) of the NIH as Chief of the Devices and Technology Branch. There, he oversaw research and development of cardiovascular imaging systems such as MRI, ultra-fast CT, PET, and Ultrasound; implantable materials used in current cardiovascular implants and devices; ventricular assist systems and the TAH. He then served as Acting NHLBI Deputy Director and Director of Clinical and Molecular Medicine until 2003, with oversight of 60 major clinical trials, genomics, and proteomics, tissue engineering and regeneration, computational biology and informatics, and adult and pediatric circulatory support programs. Dr. Watson was the first NIH scientist/engineer elected to the National Academy of Engineering (NAE) and was an invited member of the nominating committee for the Japanese Kyoto Prize and the NAE Draper Prize.

Dr. James T. Willerson

Dr. Willerson (Fig. 11) is a native of Lampasas, TX, USA, the son of two physicians. He attended The University of Texas on a swimming scholarship and lettered his sophomore, junior, and senior years. He graduated Phi Beta Kappa and received the UT Academic Award as the athlete with the highest scholastic average. In 1989, Dr. Willerson came to Houston as chair of the Department of Internal Medicine at the UT Medical School. During this tenure, he led the way in creating what is now known as the Brown Foundation Institute of Molecular Medicine for the Prevention of Human Diseases. Dr. Willerson has set new fundraising records for the UT Health Science Center through the New Frontiers campaign, which has raised nearly $200 million for the new Fayez S. Sarofim Research Building for the IMM and for the recruitment of the "world's best" scientists in several disciplines.

Today, Dr. Willerson remains an active clinician, researcher, and educator in addition to his role as president. Holder of the Edward Randall III Chair in Internal Medicine and the Alkek/Williams Distinguished Professorship, Dr. Willerson is a prolific writer who has edited or coedited 19 textbooks and published over 750 scientific articles. He served as Editor-in-Chief of *Circulation*, the American Heart Association's largest scientific journal, from 1993 to 2004. Earlier this year, Dr. Willerson received the American Heart Associations' Gold Heart Award,

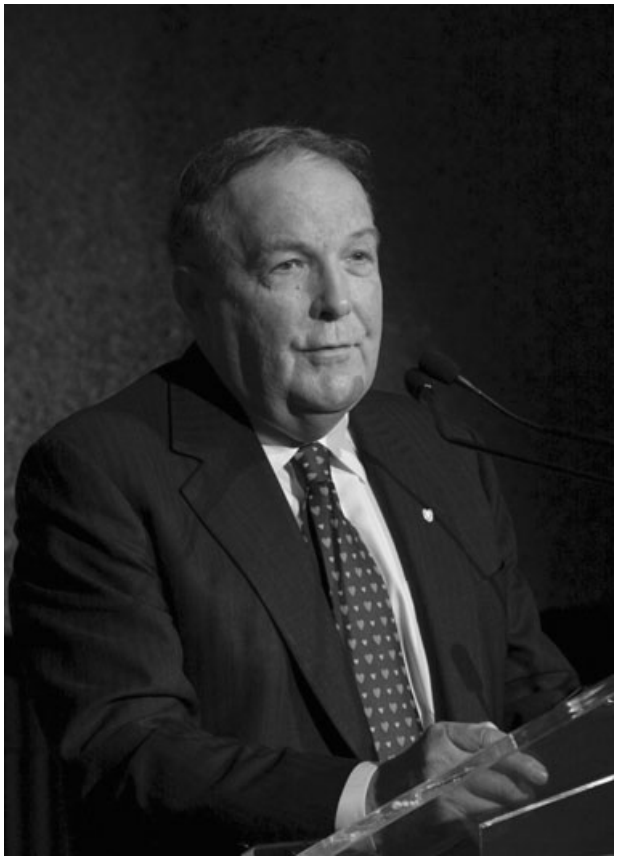

FIG. 11. Dr. James T. Willerson.

the organization's highest honor for volunteers who have provided distinguished service.

His current research interests include the use of stem cells to improve severely damaged heart tissue. Dr. Willerson and colleagues at the Texas Heart Institute now lead one of the first FDA-approved clinical trials to treat patients with end-stage heart disease using their own bone marrow-derived stem cells.

Dr. Earl Wynands

Dr. Earl Wynands (Fig. 12) graduated from McGill University in 1954 where he obtained his specialist anesthesia training in 1959. He was Professor of Anesthesia and Surgery at McGill until 1988. He was then appointed Professor and Chairman of Anesthesia at the University of Ottawa and continued his cardiac anesthesia work at the Ottawa Heart Institute until his "retirement" in 1996. Dr. Wynands pioneered the anesthesia management of patients undergoing myocardial revascularization surgery, with or without cardiopulmonary bypass.

Dr. Wynands' research detailed important factors that decrease perioperative surgical morbidity and mortality. His publications and lectures covered a wide range of topics which have included monitoring techniques and pharmacological interventions for the diagnosis, prevention, and treatment of intra- and postoperative myocardial ischemia; systolic and diastolic heart failure; and oxygen transport in the critically ill. He has lectured in Canada, the USA, Mexico, Europe, and Japan. He is a past president of the Canadian Anesthesiologists' Society, the Society of Cardiovascular Anesthesiologists, and is the founding president of the Cardiovascular and Thoracic Section of the Canadian Anesthesiologists' Society. He has received many awards including the Order of Canada, the Gold Medal of the Canadian Anesthesiologists' Society, the Distinguished Service Award of the Society of Cardiovascular Anesthesiologists, the Wilbert J. Keon Award for Achievement in Cardiovascular Medicine, and has an Honorary Doctorate from the University of Montreal, Faculty of Medicine.

Dr. Ernst McCulloch

Dr. Ernst McCulloch (University of Toronto) was also to be honored as a Living Legend, but was unfor-

FIG. 12. Dr. Earl Wynands.

tunately unable to attend the World Congress. Dr. E.A. McCulloch was educated at Upper Canada College and the University of Toronto, where he received his MD degree in 1948. He then spent a year at the Lister Institute in London, England, where he began his education in research. His major work has been concentrated on normal and malignant blood formation. With his colleague Dr. Till, he devised the first functional assay (the spleen colony assay) for primitive blood cell precursors (pluripotent stem cells or CFU-S). The discovery of the spleen colony assay for stem cells and its exploitation were major stimuli for the development of the field of experimental hematology. Since 1970, he has concentrated on the malignant cells characteristic of acute leukemia in humans.

He has been an invited symposium or seminar speaker in many countries in North America, Europe, the Middle East, and Asia, and in collaboration with his colleagues and students has reported his findings in over 275 published articles. He served as the Head of the Division of Molecular and Cellular Biology at the Ontario Cancer Institute, a post he held until his 65th birthday. After that time, he continued his research in leukemia as a Senior Scientist Emeritus. From 1991 to 1993, Dr. McCulloch was a Visiting Professor of Laboratory Medicine and Pathology at the University of Texas, M.D. Anderson Cancer Center.

Dr. McCulloch has served on a number of provincial, national, and international medical and scientific bodies including as President of the Academy of Science in the Royal Society of Canada and for over 20 years was an editor of the *Journal of Cellular Physiology*. Dr. McCulloch's work has been recognized by numerous prestigious awards and honors, including the Annual Gairdner Award, the Eadie Medal of the Royal Society of Canada (both with J.E. Till), and the Stratton Lectureship of the American Society of Hematology. In 1999, he was elected a fellow of the Royal Society of London and in 2004, he was inducted into the Canadian Medical Hall of Fame.

SURPRISE AWARDS

Following the Living Legends ceremony, three surprise awards were also announced. In the first surprise award, Dr. Joel D. Cooper, the Chair of the 16th World Congress was also inducted as a Living Legend. Dr. Cooper (Fig. 13) is the Chief of Division of Thoracic Surgery, University of Pennsylvania Health System and performed the world's first successful lung transplant in 1983 and the first successful double-lung transplant in 1986.

A summa cum laude graduate of Harvard, Dr. Cooper graduated with honors from Harvard Medical School and completed his chief residency at the Massachusetts General Hospital in 1972. His training included the Southwest Regional Thoracic Unit in Bristol, England as a senior registrar and a research fellowship in pulmonary physiology with Dr. John West at the Hammersmith Hospital in London. After serving as head of Thoracic Surgery for 10 years as a member of the faculty of the University of Toronto, Canada, Dr. Cooper joined the faculty of Washington University as head of General Thoracic Surgery in 1988, and became Chief of Cardiothoracic Surgery in 1997 before moving to his current position in 2005.

In 1983, the team headed by Dr. Cooper in Toronto performed the world's first successful lung transplant. In 1986, the same team performed the world's first successful double-lung transplant. In 1993, Dr. Cooper and colleagues presented their results on a new operation known as lung volume reduction surgery, designed to improve the breathing capacity of a patient suffering from severe emphysema. In

FIG. 13. Dr. Joel D. Cooper.

1996, Dr. Cooper received the Jacobson Innovation Award from the American College of Surgeons in recognition of his innovations in the field of lung transplantation and emphysema surgery. In 2003–2004, Dr. Cooper served as the President of the American Association for Thoracic Surgery.

The second surprise award was presented to Dr. Wilbert J. Keon (Fig. 14), in recognition of his contributions to humanity. This award was presented on the occasion of the 30th Anniversary of his founding of the World Congress Host Organization, the University of Ottawa Heart Institute. Dr. Keon had previously been awarded the Living Legends award in 2001. The final surprise award was to Mrs. Ann Keon (Fig. 15) in recognition of her contributions to humanity related to her vital and under-recognized role in the development of the University of Ottawa Heart Institute into a world-class healthcare and research institution.

CONCLUSIONS

The ability to participate in a gathering of such prestigious scientists is truly a motivating experience.

FIG. 14. Dr. Wilbert J. Keon.

FIG. 15. Dr. Tofy Mussivand and Mrs. Ann Keon.

This group of Living Legends has essentially shaped the future of healthcare through their work. While each of these individuals has certainly displayed a common thirst for knowledge, and a relentless drive, they have also undoubtedly endured major personal sacrifice to advance the science and art of medicine. These are not just great scientists, but they are true humanitarians. It was therefore my great honor to organize this event, one that will undoubtedly provide me a constant source of motivation into the future. I also look forward to the next series of Living Legends, with these awards now becoming a permanent activity to celebrate and pay homage to great achievement and even greater individuals in our field.

Acknowledgments: Photo Credits—Mike Pinder Photography.

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