## 2007 ASHG Leadership Award Walter E. Nance, M.D., Ph.D. By Cynthia C. Morton



It is an honor for me to introduce to you this afternoon the recipient of the 2007 ASHG Leadership Award, Dr. Walter Nance. Of course, Dr. Nance is no stranger to you, having served among other roles as the President of our esteemed Society. I had the personal pleasure of being a graduate student in the Department of Human Genetics at the Medical College of Virginia during Dr. Nance's tenure as its Chair, and have existed ever since that time as one of his devoted followers. It is my sincere hope that in the next few moments you will travel with me on a brief journey of this remarkable individual's accomplishments.

*The family history.* As human geneticists we all know that it always starts with a family history. Dr. Nance was born in Manila, the son of a surgeon in practice with the Public Health Service in the Philippines, who had been raised in China. You can probably already sense that this was not an ordinary American family! I feel compelled to share a bit of the family history to give you a context within which you can appreciate the many interests of the human geneticist we honor today. Dr. Nance's paternal grandfather, also Walter, was an educational missionary who traveled to China on a clipper ship before the turn of the century and became the President of Soochow University, where he spent most of his career as a Greek and Latin scholar. His paternal grandmother was in the first graduating class of women at Vanderbilt University and home schooled her three sons in China. His father obtained his undergraduate and medical school education at Vanderbilt University, went to New Orleans for his house staff training where he met and married Walter's mother, and then to the Philippines where Walter and his older brother were born. From there he went on to Shanghai where he established a small group practice with his two brothers and a sister-in-law.

*The making of the human geneticist.* Walter and his family lived in Shanghai until 1941 when the State Department ordered all American civilians to leave China. At that time his mother, brother and sister returned to New Orleans while his father went to the Philippines, thinking it was as safe as the continental United States, and secured a position as the physician for a gold mining firm in Bagiuo, the summer capital of the Philippines. After December 7<sup>th</sup> of that year, his father was imprisoned in two Japanese internment camps where he set up and ran the camp hospitals. Following his rescue in 1945 and return to the U.S., Walter's family moved to Tennessee where he attended junior high school and two years of high school, before entering the Philips Exeter Academy in New Hampshire. Walter obtained his undergraduate education from the University of the South in Sewanee, TN with a major in mathematics and then earned the M.D. degree from Harvard Medical School in 1958. One summer while serving as an extern at Oak Ridge Hospital, he helped a close family friend deliver a pair of twins, and innocently asked whether there was any way you could tell identical from fraternal twins. "You damned Harvard students are all the same," the obstetrician yelled. "Why don't

you find out for yourself?" When he returned to school, Walter wrote a paper on twins, which earned him the Boylston Society Award, First Prize, and was later published in the journal *Medicine*. Walter completed his internship and residency at Vanderbilt, where he continued his interest in genetics, earning a reputation of being more interested in the family history than the present illness. One day, after speculating in a Grand Rounds presentation that the rare complication of hemolytic anemia seen in some patients with brown spider bites might reflect a genetic sensitivity, similar to the recently described G-6-PD deficiency, his Chairman, Dr. David Rogers urged him to obtain training in genetics "...before you hurt somebody". This prompted Walter, in 1961, to pursue this passion fully as a postdoctoral fellow in the Department of Medical Genetics at the University of Wisconsin in Madison. In this amazing environment Walter studied genetics with Jim Crow, Charlie Cotterman, Klaus Pateau and Newton Morton, and became the first graduate student and post-doctoral fellow of Oliver Smithies, who has just recently been recognized as one of the recipients of the 2007 Nobel Prize in Physiology or Medicine. I think you will have to agree with me that both "nature and nurture" were aligned in the making of Walter Nance, and in celebrating his amazing accomplishments today, we also recognize the many contributions of his special family and mentors.

The human geneticist. In 1963 Walter returned to Vanderbilt as an Assistant Professor of Medicine and Head of the Division of Medical Genetics where he remained until 1969 when he joined the faculty at Indiana University as Professor of Medical Genetics and Medicine. In 1975 he was recruited to the Medical College of Virginia in Richmond as Professor of Human Genetics, Pediatrics and Medicine and Chair of the Department of Human Genetics. It is from this period of his life that I can personally recount his many contributions to the discipline we all cherish, as a physician and scientist, an educator, a mentor, and a true leader. I like to think that it was at this time in his career that his legacy was truly developing and unfolding as he shepherded the growth and development of a group of students and faculty, many of whom are present in this audience today, who are active members and hold leadership roles in this Society. He was our leader. Walter Nance went forward to hold many notable leadership positions in the American Society of Human Genetics including Program Chair in 1971 for the 23rd meeting, local arrangements chair for the 34<sup>th</sup> meeting in Norfolk, VA in 1983, member of the Board of Directors, its Secretary, and in 1992, President of the Society. He has also served on the Board of Directors of the American Board of Medical Genetics, as its Vice President, and in 1986 as its President. He has participated on a number of NIH committees and study sections, including serving as the Chair of the Mammalian Genetics Study Section from 1990-1992.

*The passion of the leader.* While these very public accomplishments are among those we might all wish to emulate, there are many other attributes of this leader that I hold most dear. Walter Nance baptized us with a love of discovery, leading us to think deeply about the unknown. He showed us how to apply mathematics to dissect genetic data, and to partition genetic and environmental effects using the half-sib twin model. He taught us many concepts of human genetics such as genetic heterogeneity, pleiotropy and assortative mating through his passion to understand the genetic basis of hereditary hearing loss. He brought us to scientific meetings to present our research, to develop us

into genetic professionals, and to grow to love this Society as a family of outstanding scientists and individuals. He always accompanied us for at least one dinner at the meeting, which consistently cost us each \$5, and danced with us at the parties until the wee hours. While many of you have attended reunions of your programs over the years here at the annual meeting, I took special pride in the published listing of the events of the meeting for the gathering of my MCV colleagues, "The Applied Probability Seminar", otherwise known as the annual MCV poker game, with our leader in charge of the chips. Walter Nance led us by his brilliance, his ever inquisitive mind and his love of life.

The humanity of the leader. Despite vivid recollections of many of us about being "Nanced", when he had yet another creative idea about how we might analyze our data, we all knew that he cared about us deeply. He brought us into his home in Richmond for Journal Clubs where we munched on fritos, cheetos, and popcorn and drank beer, and hosted picnics in his backyard where we welcomed the new students, played volleyball and devoured individual homemade pecan tarts. Perhaps it is no surprise that we remain tightly bonded to each other today. Nonetheless, Walter also had his own family of which he was enormously proud, including his son Dana, also a mathematician, and his daughter Martha, also a geneticist. In the more recent past, he enriched our lives by marrying Mayna, who had the great challenge of taking us all in as his extended family. To someone who has taken me from crayons to perfume...*To Sir, With Love...*I ask you to join me now in recognizing Dr. Walter Nance as the recipient of the 2007 ASHG Leadership Award.

Accomplishing Collective Goals Walter Nance



This December will mark the 60<sup>th</sup> anniversary of the discussions between 5 prominent PhD geneticists at the Annual meeting of the American Academy of Sciences that led to the establishment of the American Society of Human Genetics. HJ Muller, a member of that group who became the first President of the new Society, was initially opposed to the admission of physicians as full members of the Society, and had it not been for the intervention of Charles Cotterman, who became the first editor of the American Journal of Human Genetics, Muller might have prevailed. However, Cotterman had attended Medical School for

15 months during his military service in WW II and was, perhaps, more sympathetic to the potential contributions of physicians to the new Society.

The first ASHG meeting that I attended was in New York, in 1963, and it is my recollection that there were about 200 participants. Since that time, of course, the size and scope of the Society has increased enormously. As Cynthia has documented in her very generous remarks, I have always considered my participation in the activities of the ASHG to be an important part of my professional career. Over the years it has amazed me to see how many new activities and programs have been initiated and/or supported by the Society, including the emergence of genetic counseling and clinical genetics, and professional accreditation as separate activities each governed by their own independent administrative organizations.

In thinking about this new award that has been established, I realized what should have been obvious all along, that the programs of the Society all represent ways in which its members can achieve collective goals that would be impossible to accomplish as individuals. Whether your interests include advocacy, teaching, patient care, counseling, ethics, forensics, mathematical analysis or research on any one of our approximately 20,000 genes, it is a virtual certainty that you can find like minded colleagues or relevant programs within the Society, and it is my firm belief that anyone who becomes a participant in the activities of Society, you will find it to be as rewarding an experience as I have.

In conclusion, I want to thank the Awards Committee and members of the Society for selecting me to be the second recipient of the Leadership Award of the American Society of Human Genetics.