

Contact: Diana Gonzalez

**REQUEST TO AWARD AN HONORARY DOCTOR OF SCIENCE DEGREE AT THE
UNIVERSITY OF IOWA**

Action Requested: Consider approval of the request by the University of Iowa to award an honorary doctor of science degree to Johan Hultin at Spring 2009 Commencement.

Executive Summary: The University of Iowa wishes to recognize Dr. Hultin for his groundbreaking work in the discipline of pathology and his contributions to national and international public health. His accomplishments are consistent with the value of higher education.

Details on Dr. Hultin's Accomplishments:

- ◇ Dr. Hultin gained national recognition as a result of his efforts to decipher the mystery of the causative agent of the "Spanish flu" pandemic of 1918-19. As a graduate student in Microbiology at the University of Iowa, he participated in a study in 1950-51 that attempted to isolate this influenza virus from the bodies of Eskimos buried in the permafrost in Alaska. The project was terminated when it became evident that it was not possible to isolate the virus from these individuals, and he was unable to fulfill his Ph.D. requirements, graduating with a Master's degree in 1951.
- ◇ Dr. Hultin graduated from the University of Iowa College of Medicine in 1953. He completed a pathology residency at the Mayo Clinic in 1958 and pursued a distinguished career as a community pathologist in the San Francisco area.
- ◇ Upon retirement from practice in 1988, Dr. Hultin continued to consider ways to investigate what made the 1918-19 influenza virus so virulent. In 1995, he learned about plans to use Polymerase Chain Reaction (PCR) techniques to characterize the influenza virus and speculated that, if the virus could not be grown, it might be possible to use PCR to characterize the genome and the virulence factors, particularly the hemagglutinin of this virus. Through collaboration with the Armed Forces Institute of Pathology at Walter Reed in Washington, D.C., he provided the tissue containing the viral DNA and the Institute performed the PCR. Using his own funds, he traveled to the same village in Alaska that he had visited in 1950-51 and obtained permission to exhume bodies from the permafrost. At the age of 74, he obtained lung tissue which allowed PCR to identify and characterize the genome of the "Spanish flu" virus. His work was published in 1999 in the Proceedings of the National Academy of Science of the United States. Investigators have now established the connection between the 1918-19 virus and avian influenza.
- ◇ The Centers for Disease Control (CDC), Federal Drug Administration (FDA), and National Institutes of Health (NIH) have cautioned that a new pandemic may be on the horizon. Dr. Hultin's work has given CDC and NIH scientists the signature of the most important virulence factor of this virus, which allows the rapid development of vaccines for prevention of a pandemic due to "Spanish flu," should the need arise.

- ◆ Dr. Hultin has also worked as an archeologist in Turkey, Sweden, and the United States. He has uncovered significant artifacts related to the ill-fated Donner party in the High Sierras of California. Most recently, at age 80, in a collaboration with investigators at one of the Max Planck Institutes in Germany, he identified the “einkorn,” the grass from which humans derived the first wheat, after an expedition to Anatolia in Turkish Kurdistan.
- ◆ In another phase of his career, Dr. Hultin was lead investigator in the development of the automobile seat belt. In 1964, he received an award for “lifesaving achievement in the service of health” in recognition of his work in automobile safety. Under commission by the U.S. Department of Transportation, he established an automotive safety engineering unit at the Stanford Research Institute in 1968.
- ◆ Dr. Hultin is a renowned mountain climber and skier. He was the oldest person to have skied (at age 58) to the summit of Muztagata, a 25,000 foot mountain in China. He also built a replica of a 14th century Norwegian log mountain dwelling in California.

Dr. Hultin has made a lifetime commitment to his community as a pathologist and has made extraordinary contributions to science and humanity in a number of different fields. He has brought great distinction and honor to the Carver College of Medicine and the University of Iowa.