

2009 RECIPIENT  
IETS DISTINGUISHED SERVICE AWARD  
ROBERT WALL

Award Presentation: Tuesday, January 6 at 11:30



Dr. Robert J. Wall received his Bachelor of Science degree in electrical engineering from Antioch College in 1967. He worked for Lockheed Missiles and Space Company and then for NASA from 1967 to 1973 as primary test conductor and electrical engineer of the Altitude Simulation System for testing the Lunar Excursion Module (LEM) descent stage engine. He returned to university to receive his M.Sc. in zoology and cell physiology from New Mexico State University in 1975 (with M. Bernstein), and then his Ph.D. in physiology and biochemistry from Cornell University in 1981 (with R.H. Foote).

Dr Wall joined the United States Department of Agriculture's Agricultural Research Service in 1981. For the past 27 years, Dr. Wall has focused his attention on developing methods for introducing new genes into animals as a tool for scientific discovery, as well as a means of improving livestock production efficiency and food quality and safety. Dr. Wall discovered a method of revealing the pronuclei in living embryos of cattle and swine, and, as a result, the ARS-University of Pennsylvania team was able to produce the first transgenic farm animals. His lab was the first to demonstrate the feasibility of producing pharmaceuticals in the milk of sows through genetic engineering, and he was the first to develop a means of detecting genes in embryos. The same basic approach is now being applied to human embryos to detect genetic diseases. Most recently, his lab produced the first genetically engineered cattle that are resistant to infection by *Staphylococcus aureus*, the most intractable cause of mastitis, a disease that costs the U.S. dairy industry over a billion dollars per year.

In 1989, Dr. Wall's Gene Transfer Unit was awarded the USDA Distinguished Service Award for "Successful development of techniques to transfer cloned genes into the genome of farm animals." He was awarded the National Award of Merit for "Excellence in Technology Transfer" by the Federal Laboratory Consortium for Technology Transfer in 1996.

Dr. Wall has authored or co-authored 85 scientific papers published in peer-reviewed journals, 36 book chapters, review articles or conference proceedings chapters, and has presented over 100 invited talks. He has collaborated with, and mentored, 22 visiting scientists and graduate students. He has been a member of the International Embryo Transfer Society since 1982, and of the American Association for the Advancement of Science since 1979. He has reviewed papers for 20 scientific journals, and grant applications for 12 U.S. and other scientific granting agencies.

In 1993, Dr. Wall took over the operation of Embryo-Mail, an international electronic mail network for embryologists. At that time, Embryo-Mail had approximately 50 members. Under Dr. Wall's direction the membership has grown to over 5,000 members in 93 countries. Since 1996, he has sent out 2,258 mailings, containing approximately 10,000 messages. He also instituted a searchable open archive of the messages and a membership directory. Because of Dr. Wall's knowledge of the area and his dedication, Embryo-Mail has become a highly-recognized and important communication resource for members of the IETS and others interested in embryo biology. The IETS is proud to present its Distinguished Service Award to Dr. Wall in recognition of his tremendous efforts in operating Embryo-Mail for the past 15 years.