

## 2005 Gruber Genetics Prize Press Release

### Robert H. Waterston, A Pioneer and Leader in Gene Mapping and DNA Sequencing, Wins International Prize

Peter Gruber Foundation Honors University of Washington Geneticist for Crucial Role in Human Genome Project and Advocacy for Public Access to Genomic Information

St. Thomas, U.S.V.I., October, 2005 - Leading researcher Robert H. Waterston, a pioneer in the field of genomics and an advocate for the free and rapid release of genomic information, was selected by an international panel of experts to receive the 2005 Genetics Prize of the Peter Gruber Foundation. Dr. Waterston is the Chairman, Department of Genomic Sciences, University of Washington and its William H. Gates III Endowed Chair in Biomedical Sciences.

The Foundation annually presents its gold medal and a \$200,000 unrestricted cash award to an outstanding scientist who has contributed to fundamental advances in the field of genetics. This year's prize was presented on October 26 at the meeting of the American Society of Human Genetics in Salt Lake City, Utah.

The official citation reads:

*"The Genetics Prize of The Peter Gruber Foundation is hereby proudly presented to Robert Hugh Waterston, M.D., Ph.D., a pioneer in the field of genomics. By mapping and then helping determine the sequences of the genomes of the nematode *Caenorhabditis elegans* and the human, Dr. Waterston played a pivotal role in the Human Genome Project. He conceptualized and executed a broad variety of large-scale genomic investigations that made the fruits of genomic sequences immediately useful to all biological scientists. His vigorous and instrumental advocacy of the importance of maintaining complete and free public access to genomic information has been critical for maximizing the use of such information to benefit humanity."*

Born in Detroit, Michigan in 1943, Robert Waterston graduated from Princeton University in 1965 with an engineering degree and received his M.D. and Ph.D. degrees from the University of Chicago. He was one of the first post-doctoral scientists to study the nematode roundworm *Caenorhabditis elegans* with Sydney Brenner in Cambridge, England. Waterston helped establish *C. elegans* as a powerful experimental organism. Later, working with John Sulston, he mapped and then determined the sequence of the *C. elegans* genome - the first time this feat was accomplished for a multicellular organism.

Waterston's work on large-scale DNA sequencing was critical to the success of the Human Genome Project, where he was the central coordinator for the physical map that formed the framework for the enterprise. More recently, he has led efforts to determine the genome sequences of the nematode *Caenorhabditis briggsae*, the mouse, and the chimpanzee, as well as to finish the sequencing of the human genome and to define a high-resolution human SNP map. His influence and support were critical to the free release of sequence and map information through the Internet, allowing other scientists to easily access these fundamental data. See video clip from Science/AAAS Breakthrough of the Year 2005: Evolution in Action.

*"Genes are responsible for heredity, and genomics is the study of all genes in an organism,"* said Peter Gruber, chairman of the Peter Gruber Foundation. *"We are extremely pleased to honor the work of Dr. Robert Waterston. He has been an essential figure in the field of genomics."*

The Genetics Prize was established in 2001 and is recognized as the leading international prize in the field. Previous winners are Dr. Rudolf Jaenish (2001), a pioneer in using mice to study and develop treatments for human diseases; Dr. H. Robert Horvitz (2002), a recent Nobel laureate who led the way in discovering how specific genes cause the programmed death of cells; Dr. David Botstein (2003), an innovator in the use of genetics to understand biological functions; and Dr. Mary-Claire King (2004), who proved the existence of the first gene for hereditary breast cancer.

The Foundation's Genetics Advisory Board, a panel of experts in the field, selects the annual winner of the prize. Current members are: Dr. David Botstein, Director, Lewis-Sigler Institute, Princeton University; Dr. Beverly S. Emanuel, Charles E.H. Upham Professor of Pediatrics and Chief of the Division of Human Genetics and Molecular Biology at The Children's Hospital of Philadelphia; Dr. Uta Francke, Professor of Genetics, Beckman Center for Molecular and Genetic Medicine, Stanford University; Dr. H. Robert Horvitz, Investigator, Howard Hughes Medical Institute, Massachusetts Institute of Technology; Dr. Rudolf Jaenisch, Professor of Biology, Whitehead Institute, Massachusetts Institute of Technology; Dr. Leena Peltonen-Palotie, Professor, Medical Genetics and Molecular Medicine, University of Helsinki; and Dr. Huntington Willard, Director, Institute for Genome Sciences & Policy and Vice Chancellor, Genome Science, Duke University.

**The Peter Gruber Foundation**

The Peter Gruber Foundation was founded in 1993 and established a record of charitable giving principally in the U.S. Virgin Islands, where it is located. In recent years the Foundation has expanded its focus to a series of international awards recognizing discoveries and achievements that produce fundamental shifts in human knowledge and culture. In addition to the Genetics Prize, the Foundation presents awards in the fields of Cosmology, Neuroscience, Justice and Women's Rights.

*Information given at time of the award*